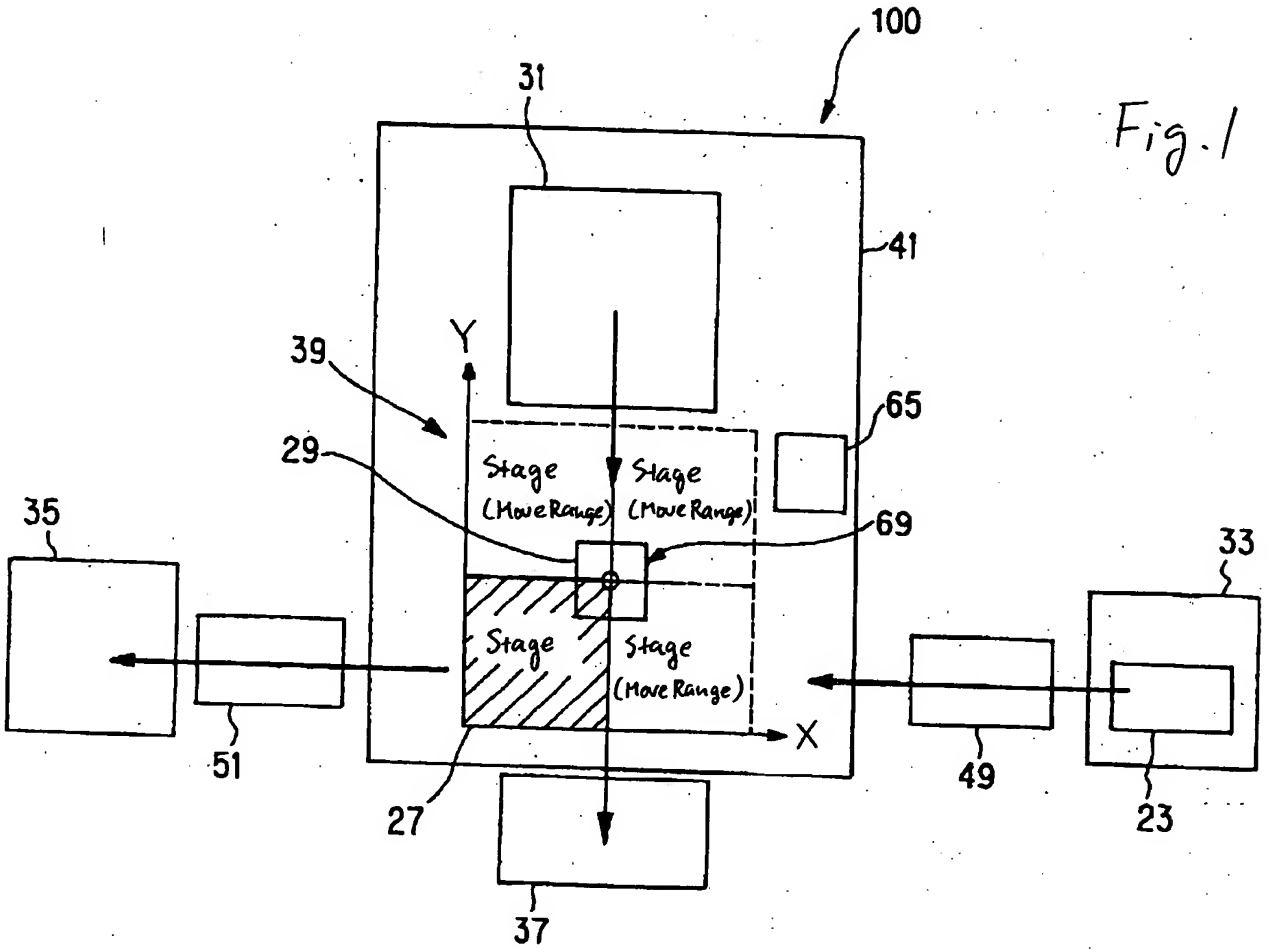

100
31
41
39
Y
65
29
Stage
(Move Range)
Stage
(Move Range)
69
35
33
Stage
Stage
(Move Range)
X
51
49
27
23
37

Fig. 1

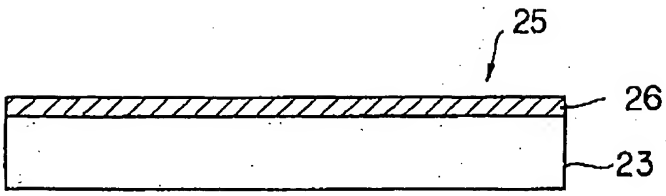


Fig. 2

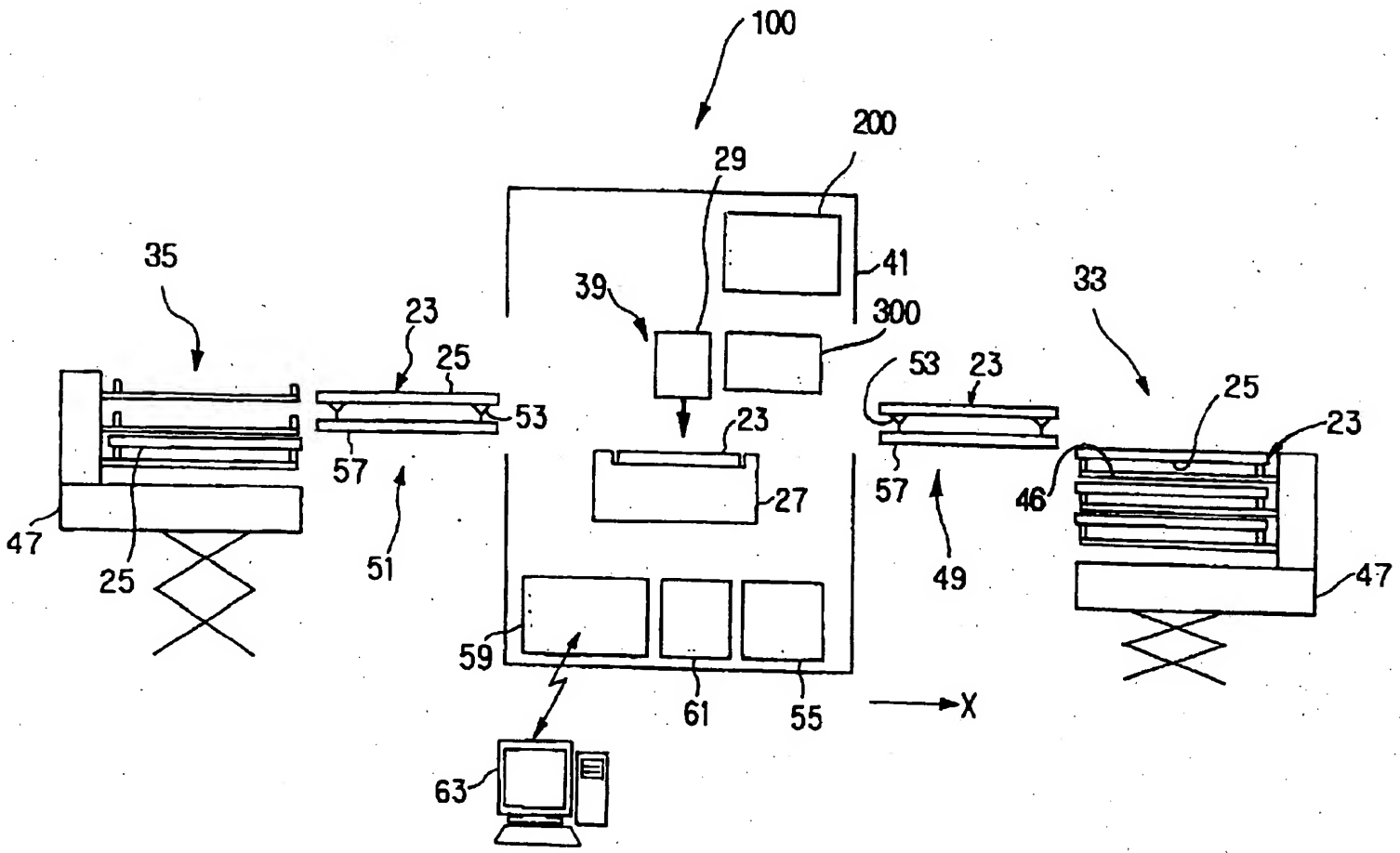

100
200
29
41
35
39
300
33
23
25
53
23
25
23
53
23
57
57
46
47
25
51
27
49
47
59
61
55
X
63

Fig. 3

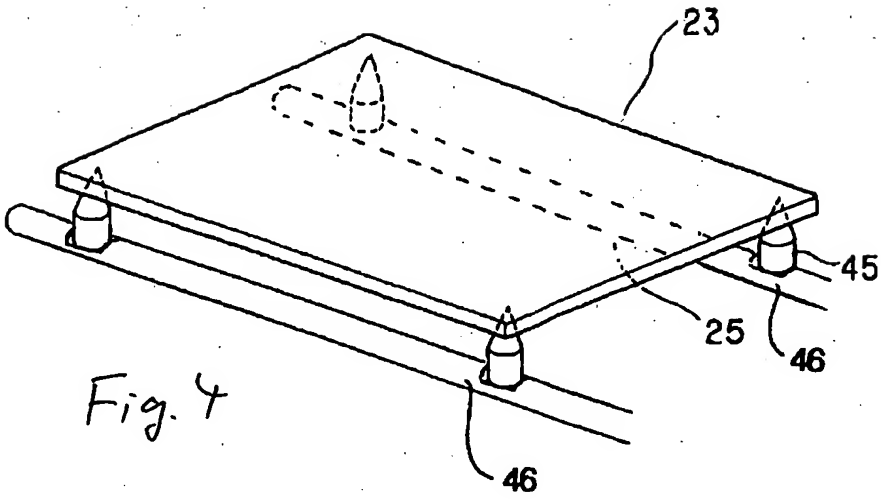


Fig. 4

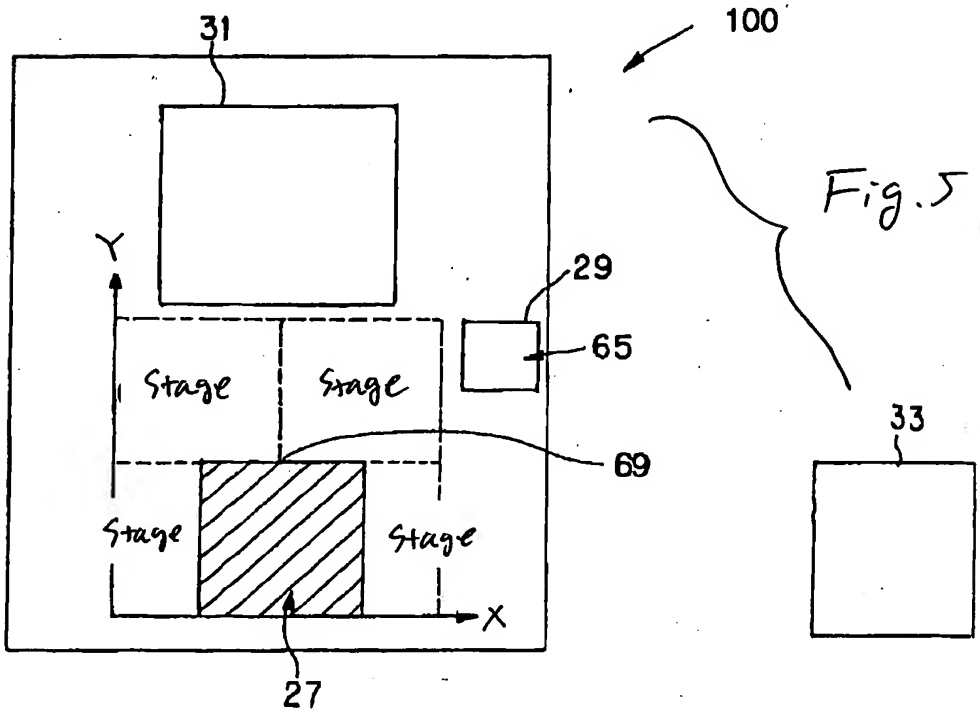


Fig. 5

Fig. 6 (a)

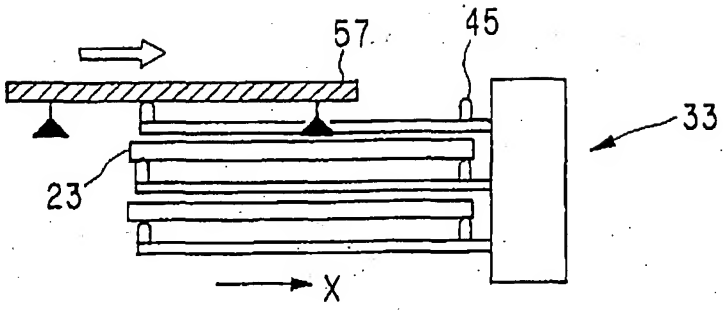


Fig. 6 (b)

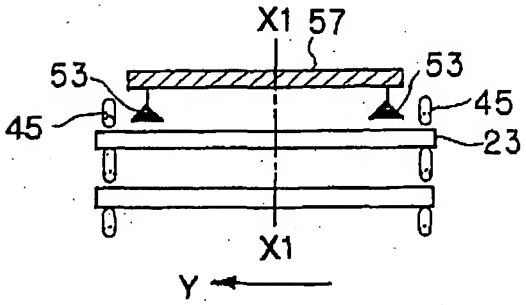


Fig. 6 (c)

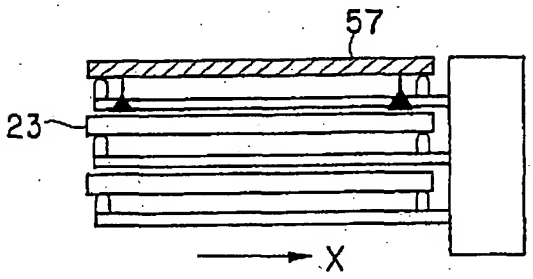


Fig. 6 (d)

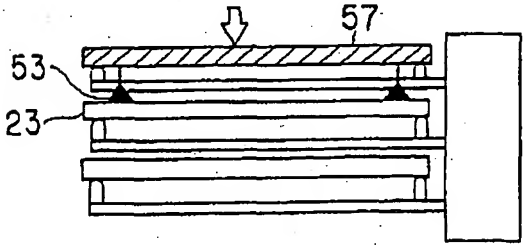


Fig. 7 (e)

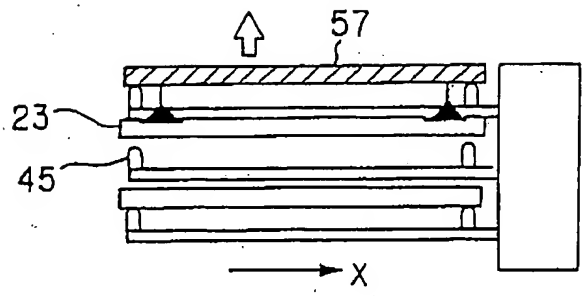


Fig. 7 (f)

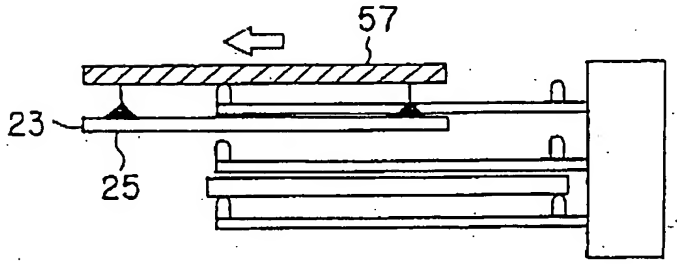


Fig. 7 (g)

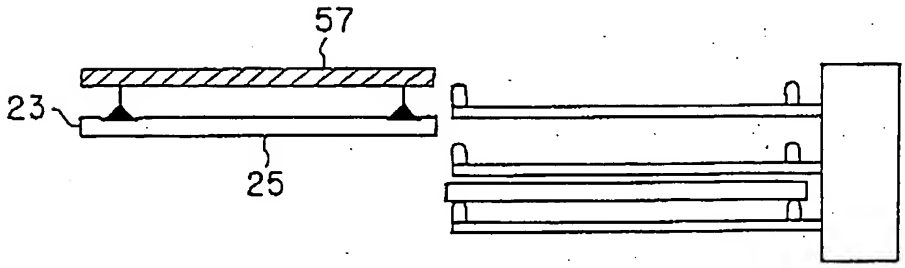
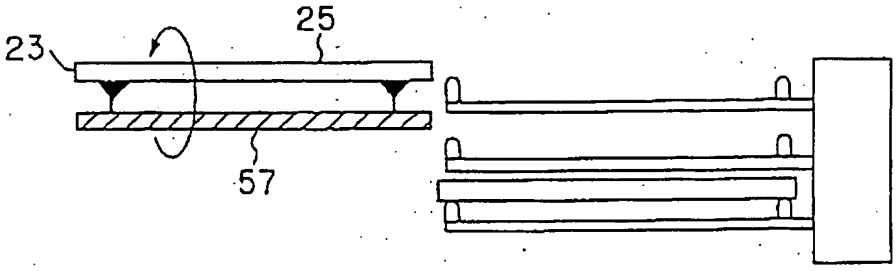


Fig. 7 (h)



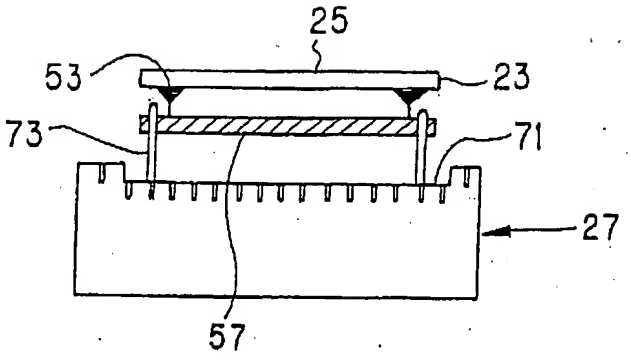


Fig. 8

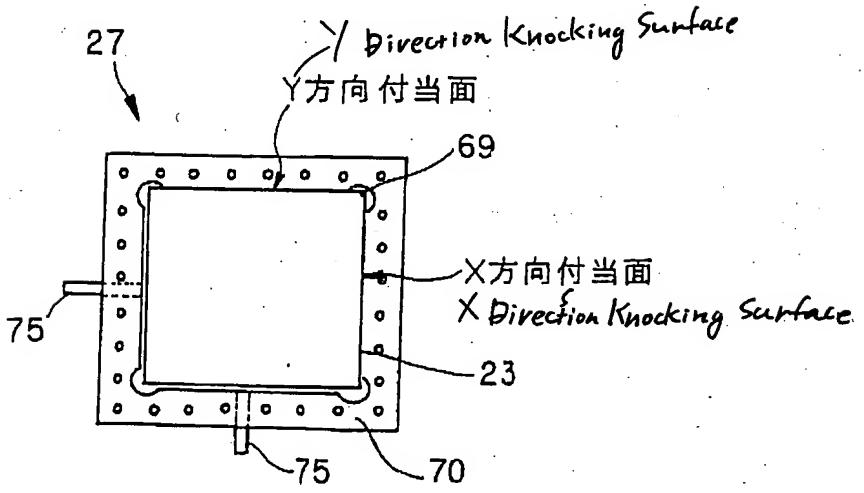


Fig. 9

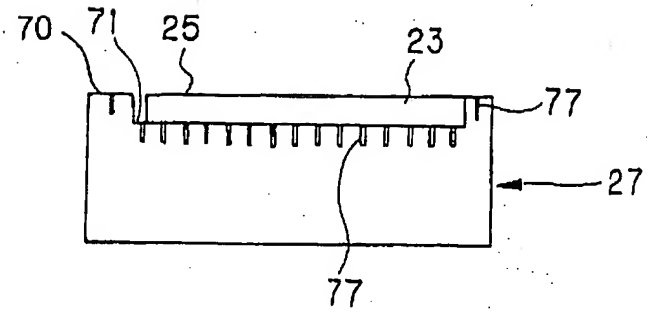


Fig. 10

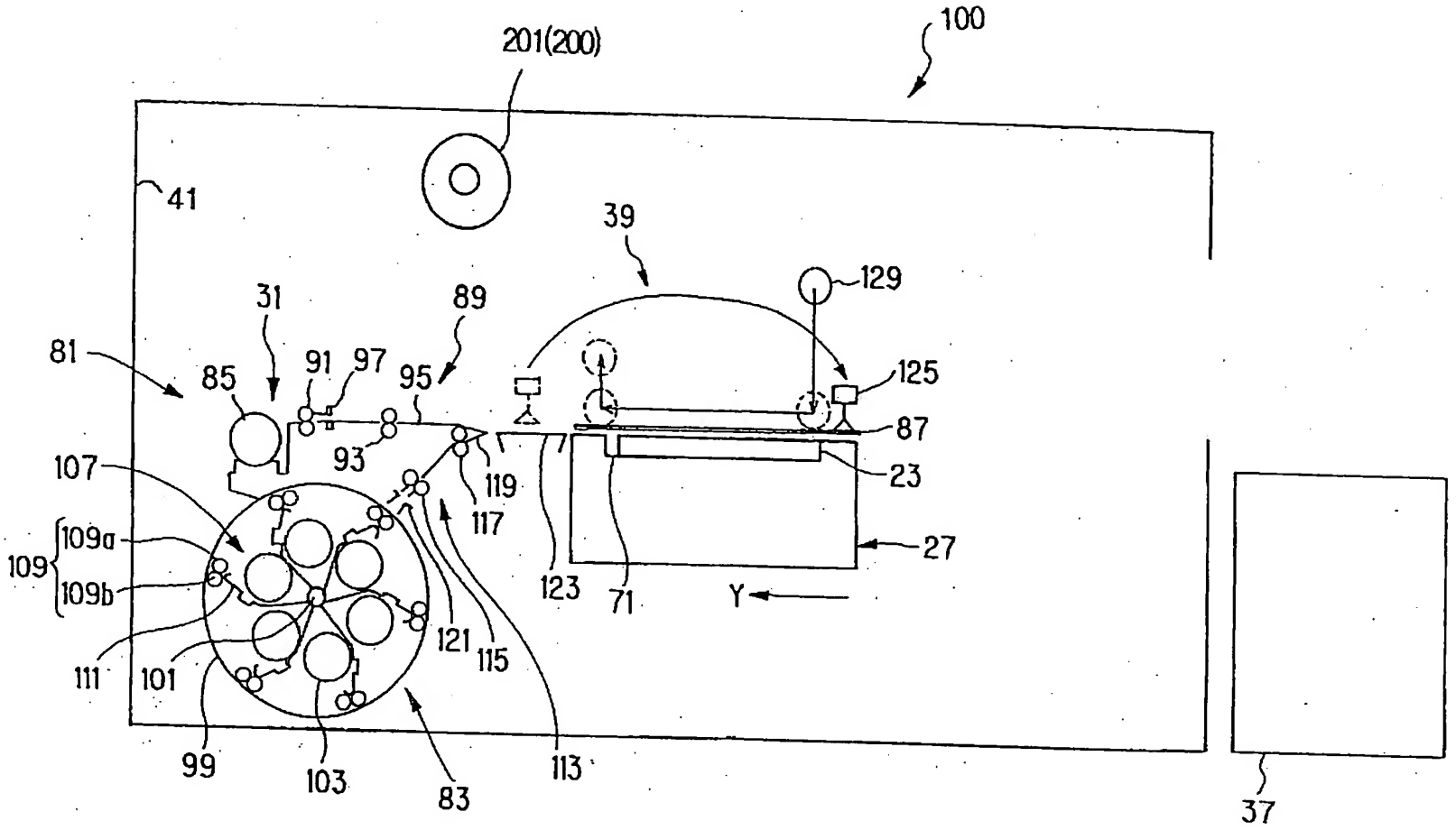

201(200)
100
41
39
129
31
89
81
85
91
97
95
125
87
93
119
107
23
117
109a
109
109b
27
123
71
Y
121
111
101
115
99
103
83
113
37

Fig. 11

Fig. 12 (a)

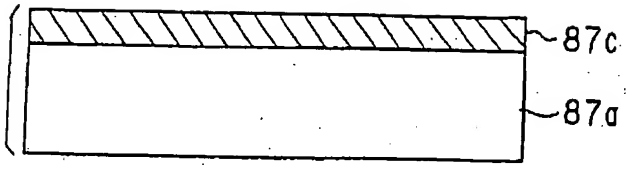
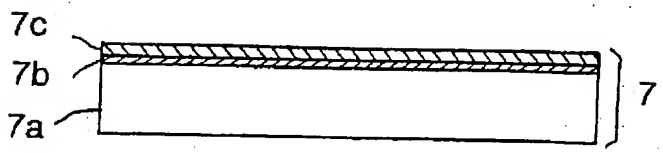


Fig. 12 (b)



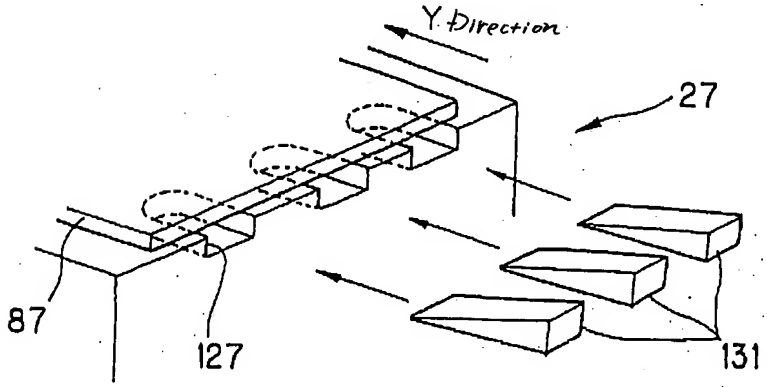
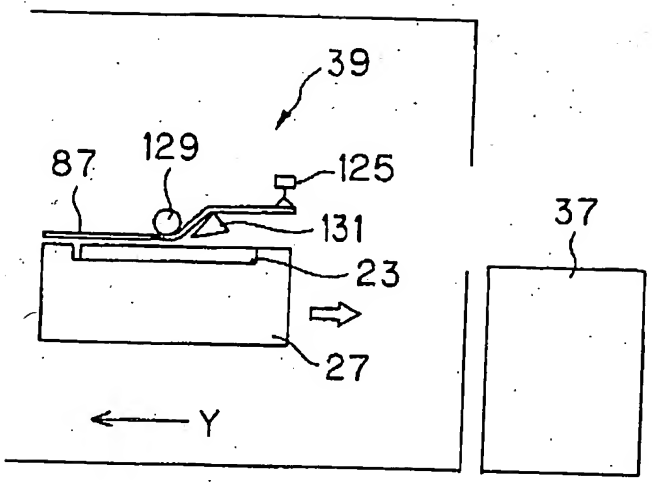


Fig. 13

(a)



(b)

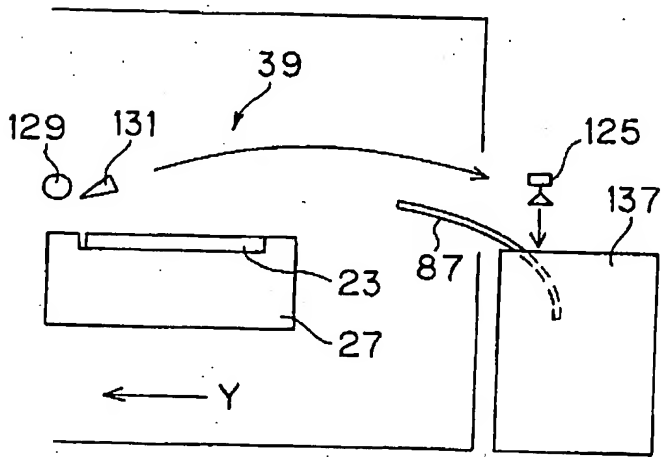


Fig. 14

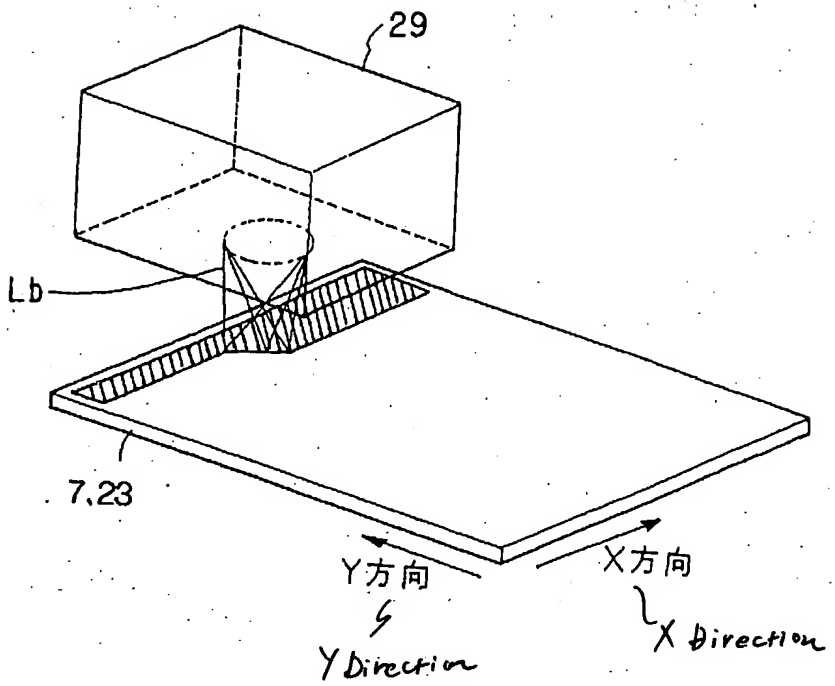


Fig.15

Fig. 16 (a)

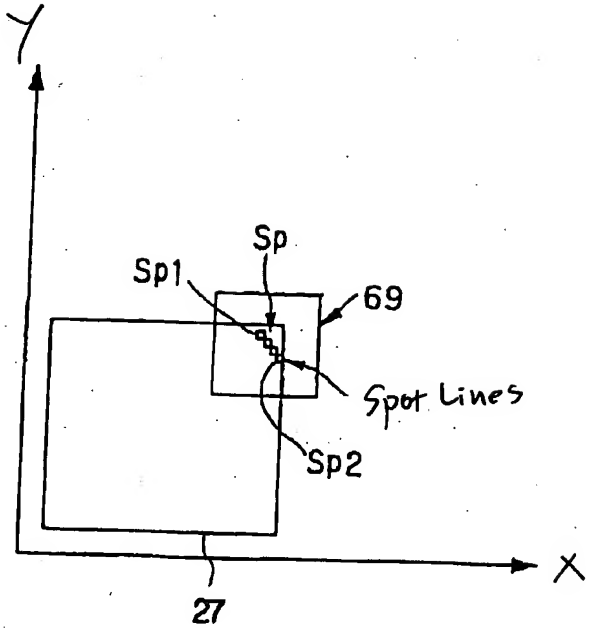
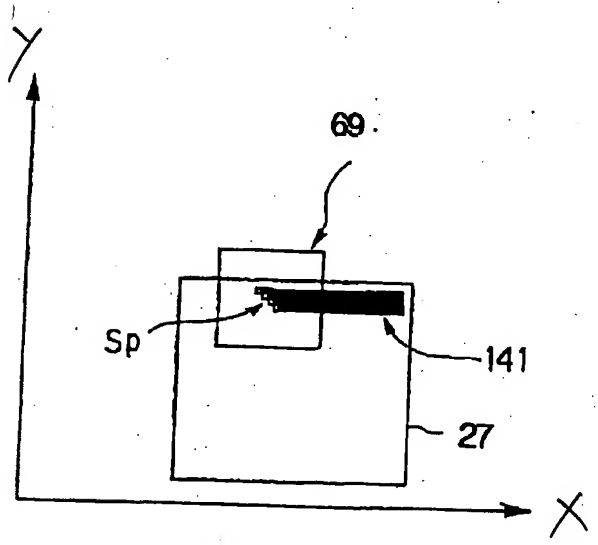


Fig. 16 (b)



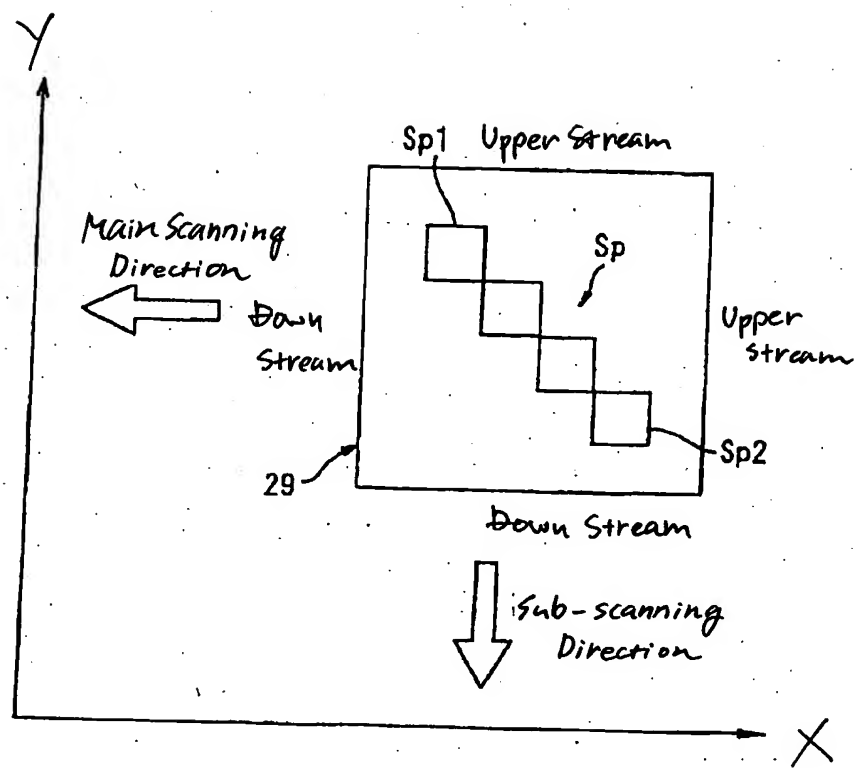

Y
Sp1 Upper Stream
Main Scanning Direction
Down Stream
Sp
Upper Stream
Sp2
29
Down Stream
Sub-scanning Direction
X

Fig. 17

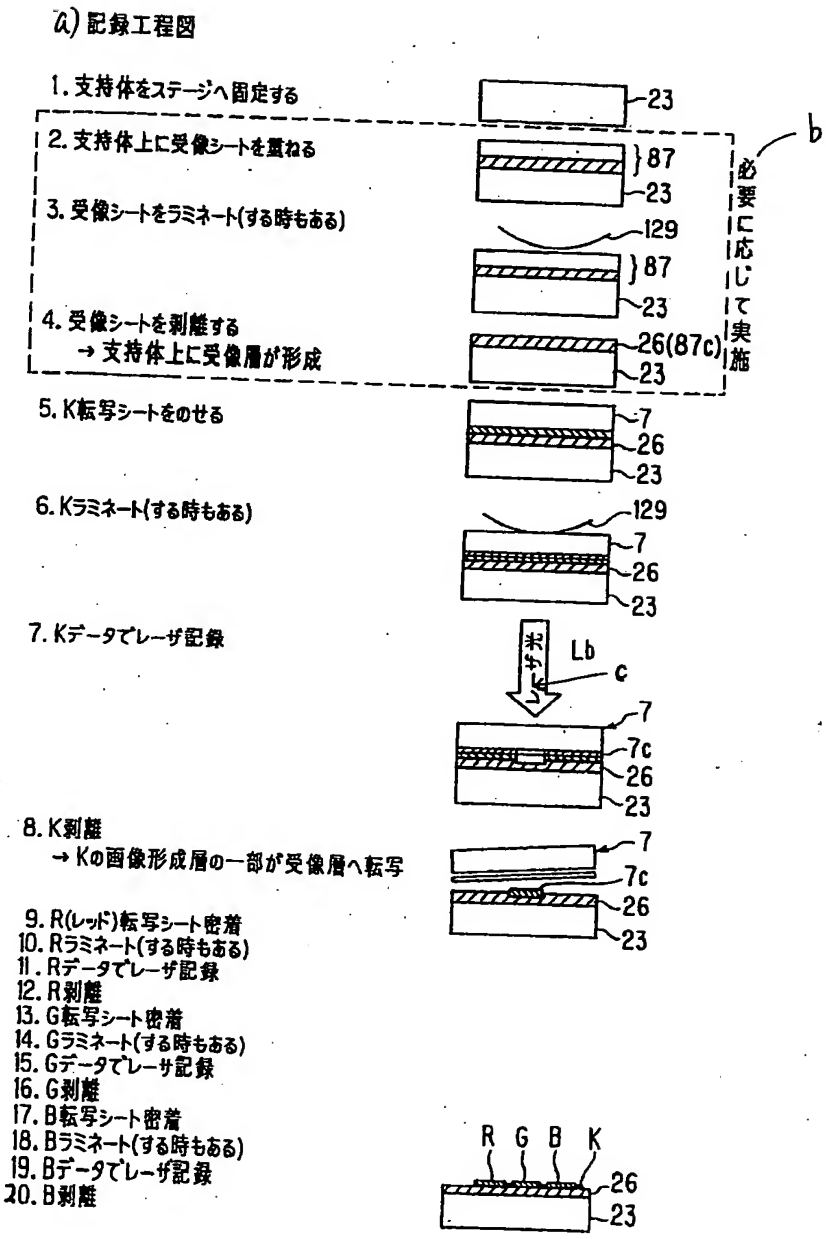
Fig. 18

a) Recording process view

1. Fix a support member to a stage
2. Superpose an image receiving sheet on the support member
3. Laminate the image receiving sheet (in some cases)
4. Separate the image receiving sheet → Form an image receiving layer on the support member
5. Mount a K transfer sheet
6. Laminate K (in some cases)
7. Carry out laser recording based on K data
8. Separate K → Transfer a part of an image forming layer for K onto the image receiving layer
9. Hermetically bond an R (red) transfer sheet
10. Laminate R (in some cases)
11. Carry out laser recording based on R data
12. Separate R
13. Hermetically bond a G transfer sheet
14. Laminate G (in some cases)
15. Carry out laser recording based on G data
16. Separate G
17. Hermetically bond a B transfer sheet
18. Laminate B (in some cases)
19. Carry out laser recording based on B data
20. Separate B

b) Execution if necessary

c) Laser beam



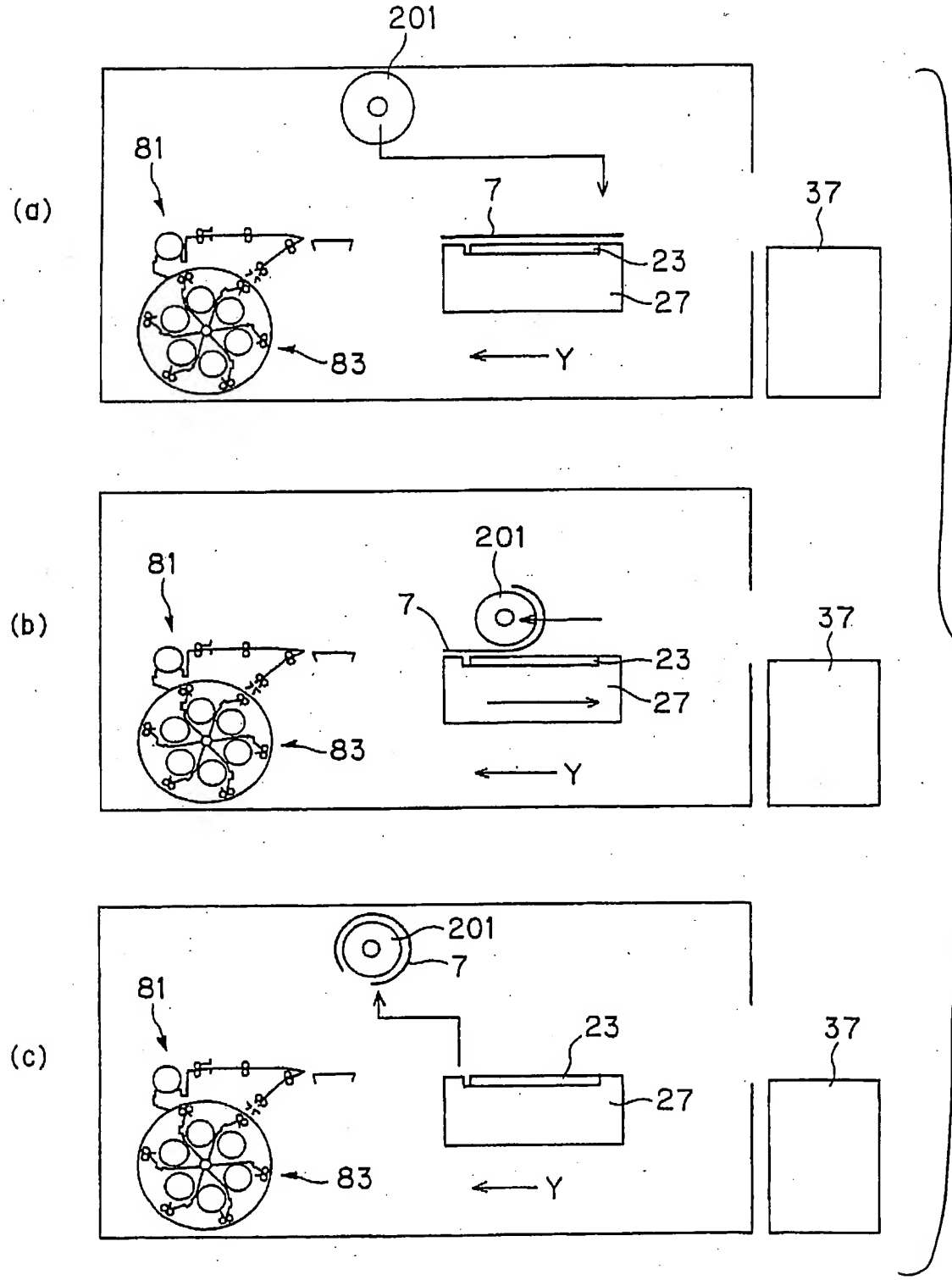


Fig. 19

Fig. 20(a)

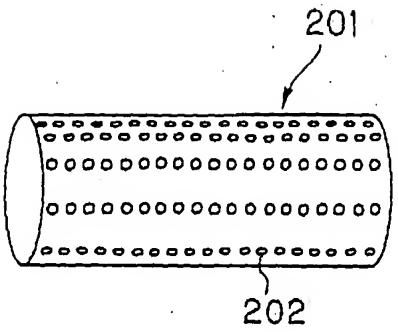


Fig. 20 (b)

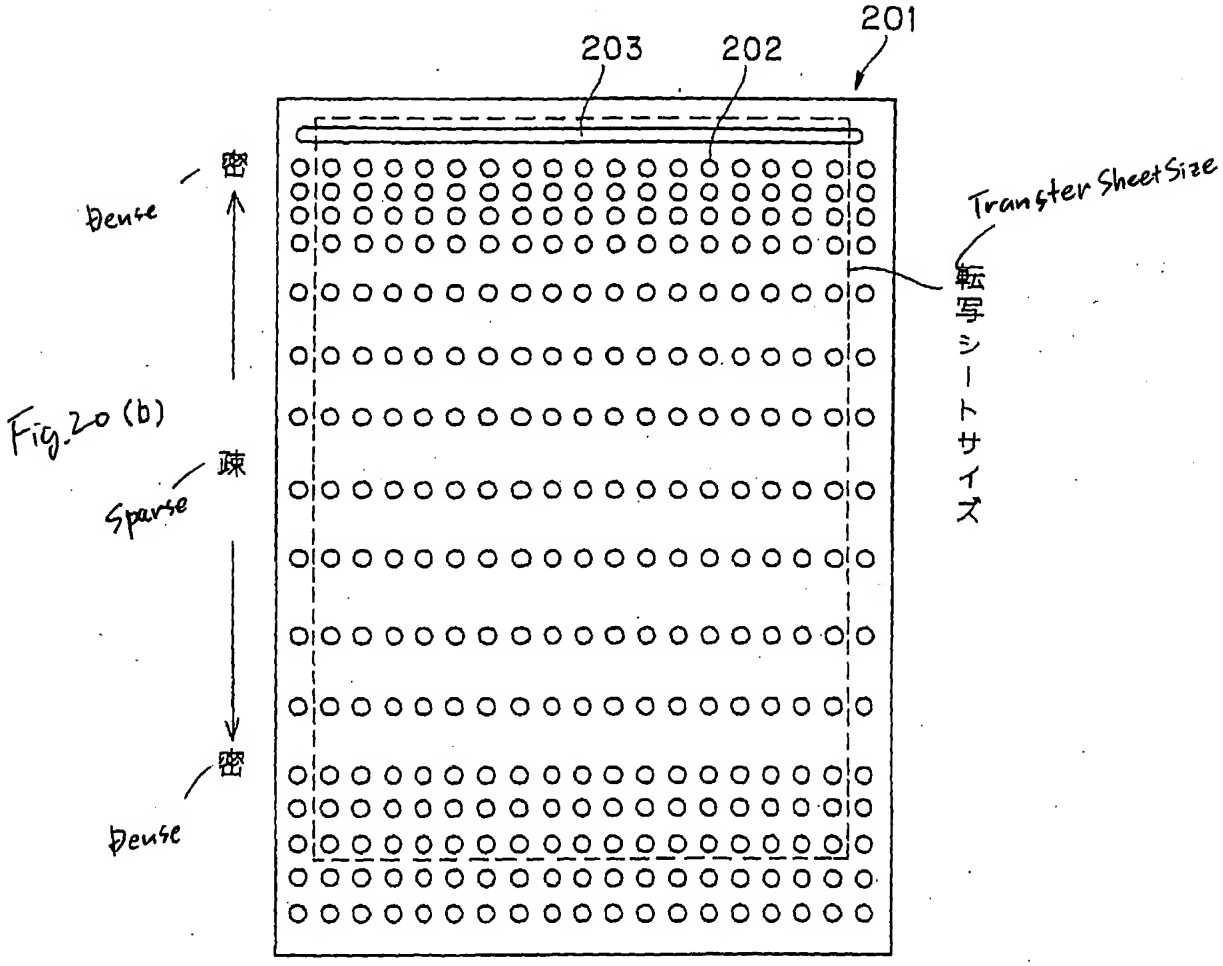
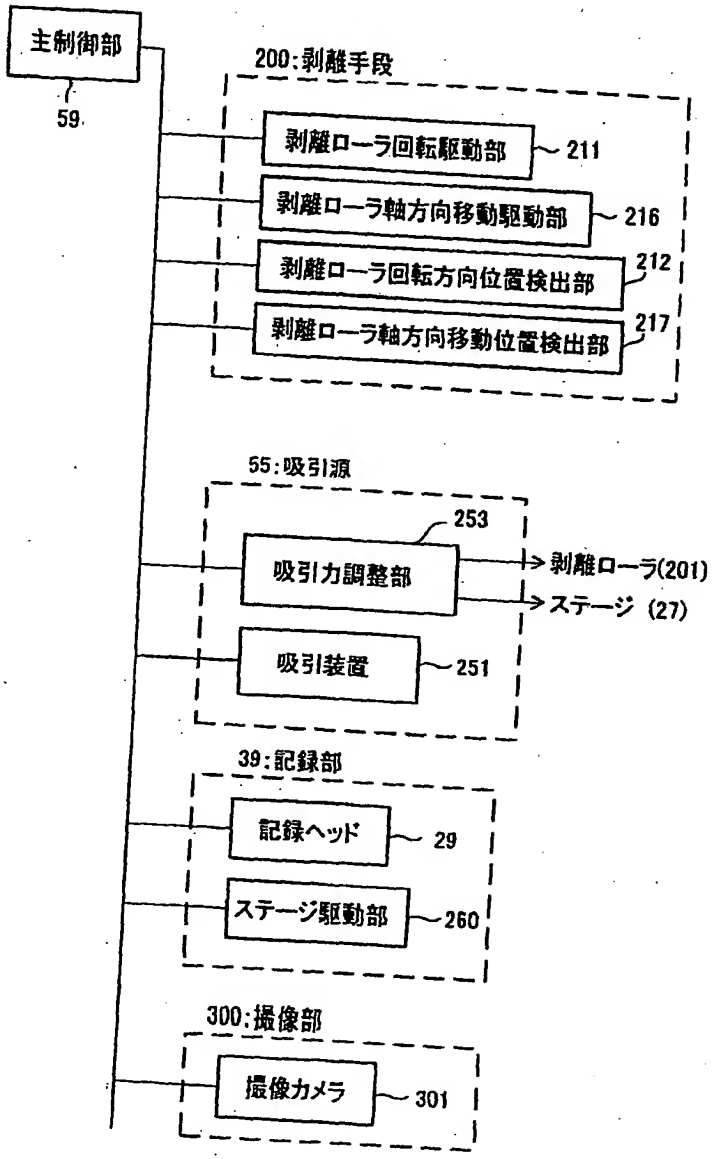


Fig. 21

(59) main control section
(200) separating means
(211) separating roller rotation driving section
(212) separating roller rotating direction position detecting section
(216) separating roller axial direction movement driving section
(217) separating roller axial direction moving position detecting section
(55) sucking source
(27) stage
(201) separating roller
(251) sucking device
(253) sucking force regulating section
(39) recording section
(29) recording head
(260) stage driving section
(300) image pick-up section
(301) image pick-up camera



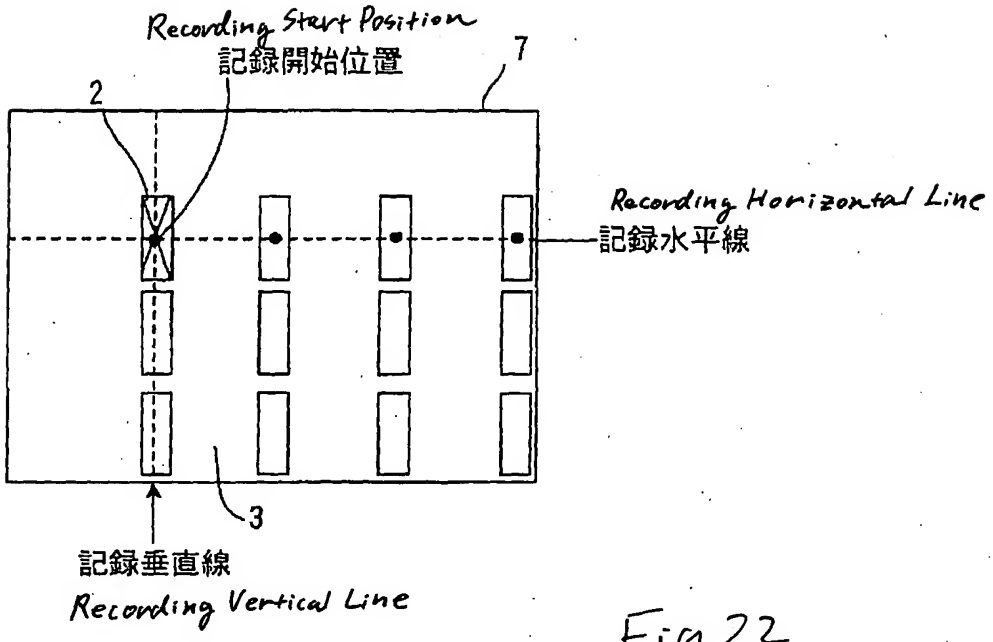
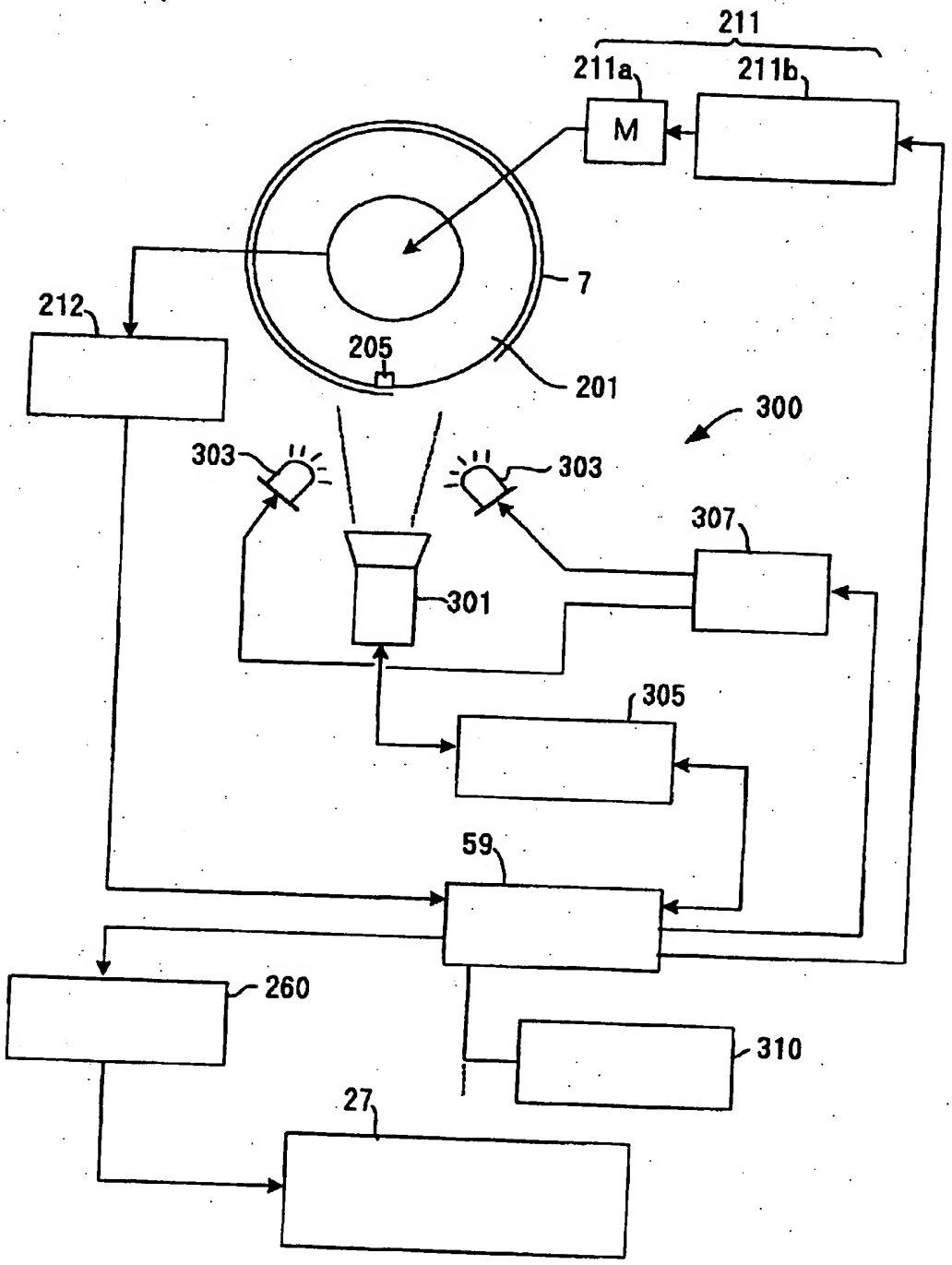

Recording Start Position
記録開始位置
7
2
Recording Horizontal Line
記録水平線
3
記録垂直線
Recording Vertical Line

Fig. 22

Fig. 23


211
211a
211b
M
7
212
205
201
300
303
303
307
301
305
59
260
310
27

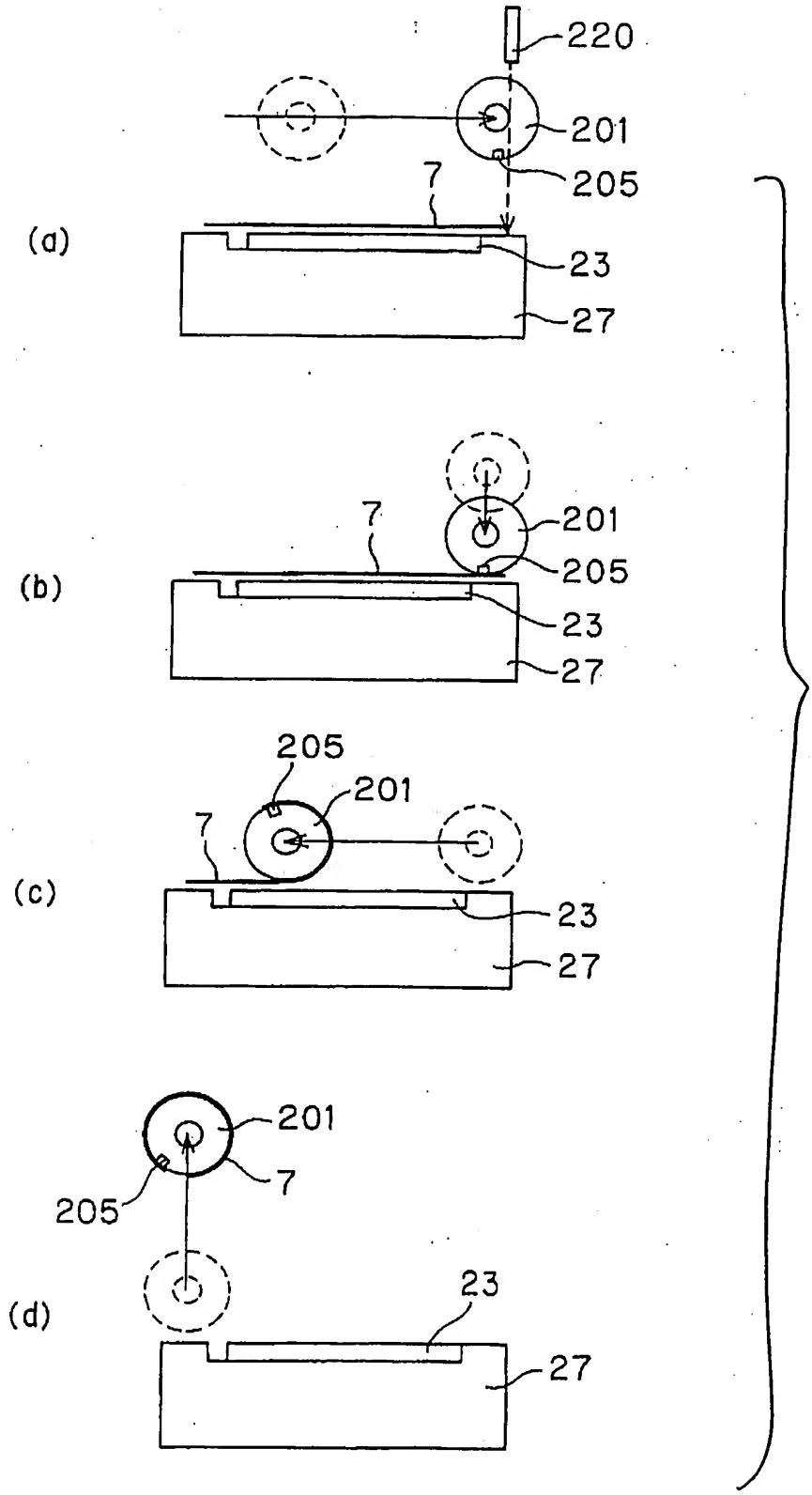

220
201
205
7
(a)
23
27
7
201
(b)
205
23
27
205
201
7
(c)
23
27
201
7
205
(d)
23
27

Fig. 24

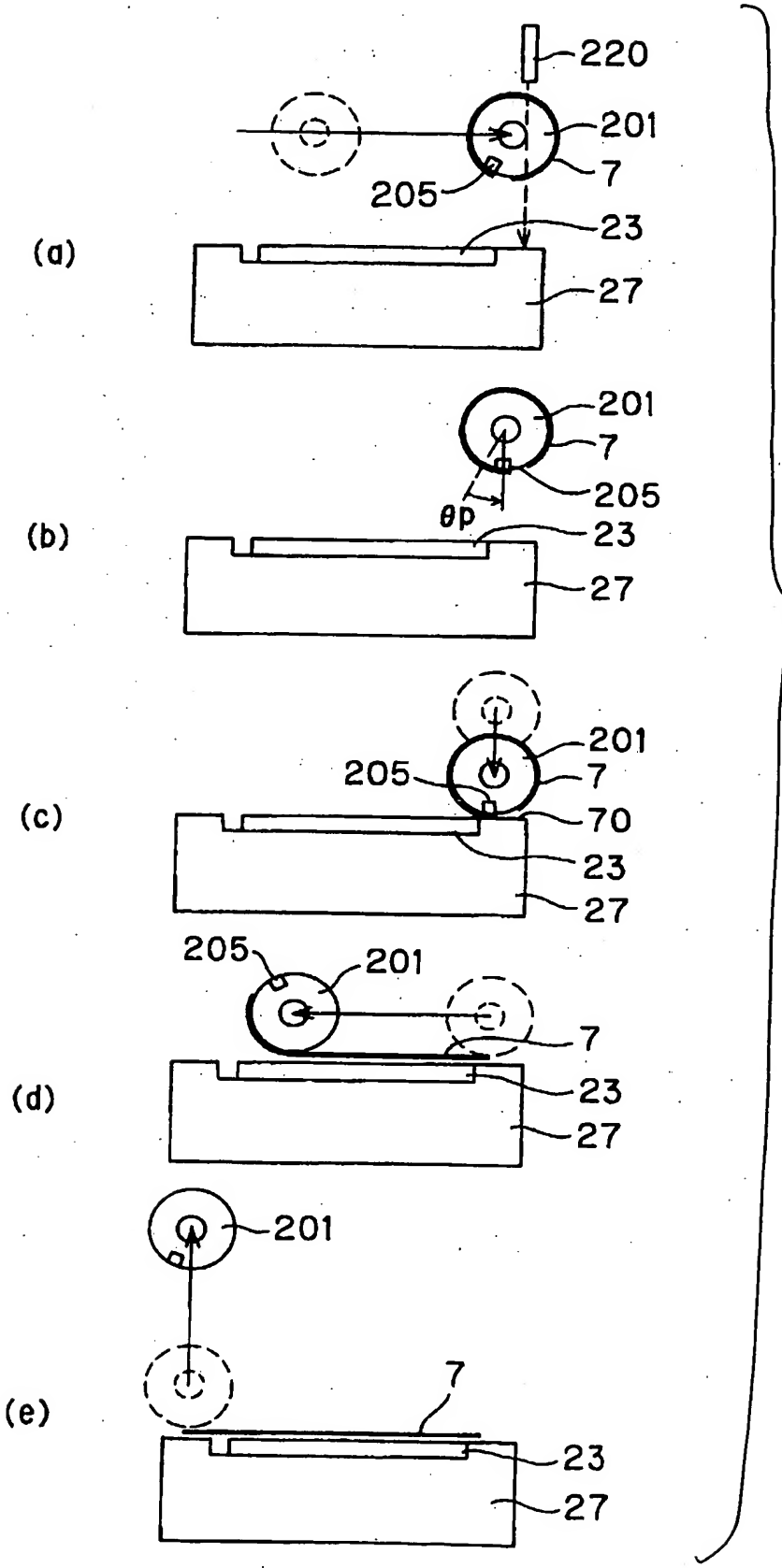

220
201
7
205
23
27
(a)
201
7
205
θp
23
27
(b)
201
205
7
70
23
27
(c)
205
201
7
23
27
(d)
201
7
23
27
(e)

Fig. 25

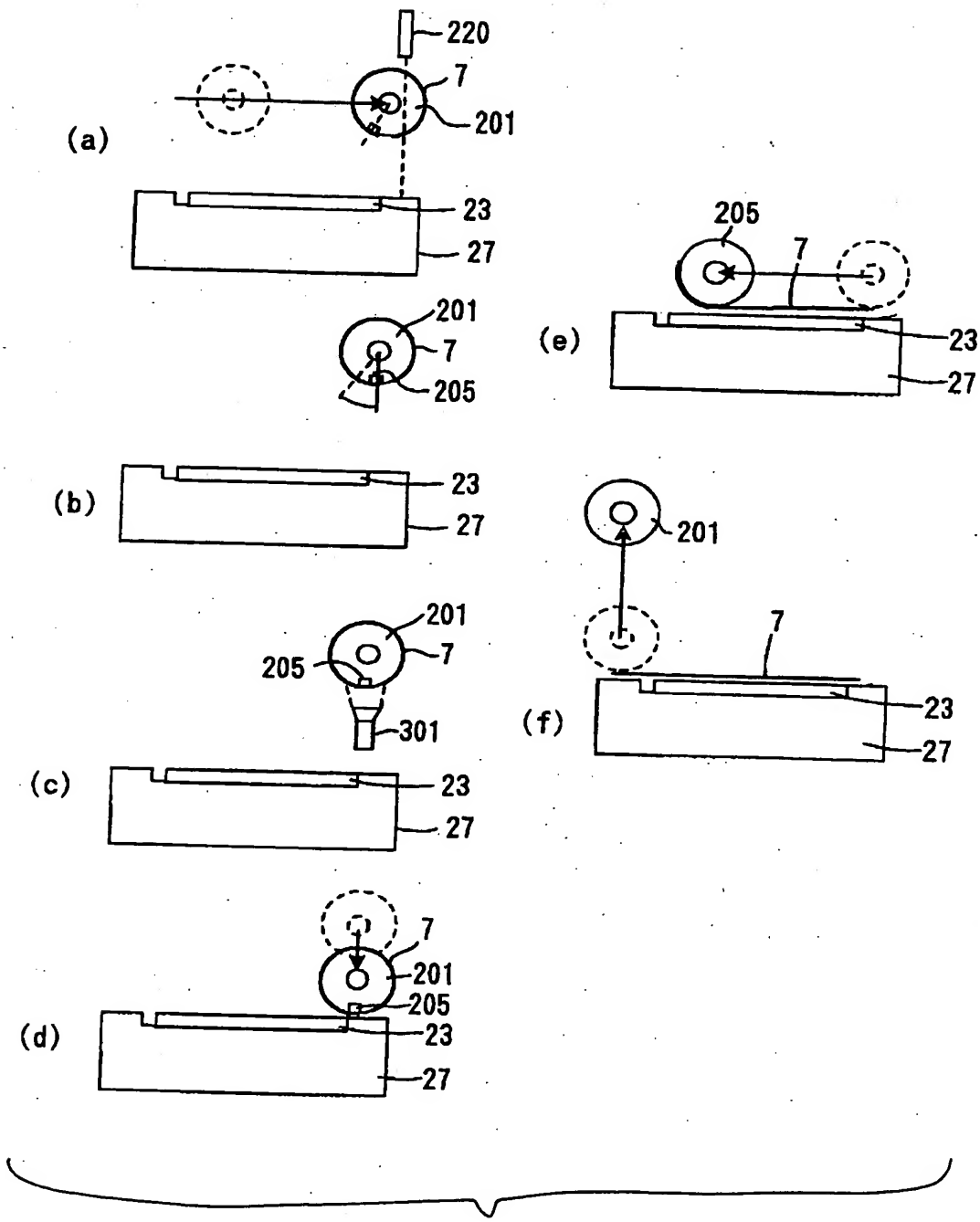

(a)
220
7
201
23
27
201
7
205
(b)
23
27
201
205
7
301
(c)
23
27
7
201
205
23
27
(d)
205
7
23
(e)
27
201
7
23
27
(f)

Fig. 26

Fig. 27 (a)

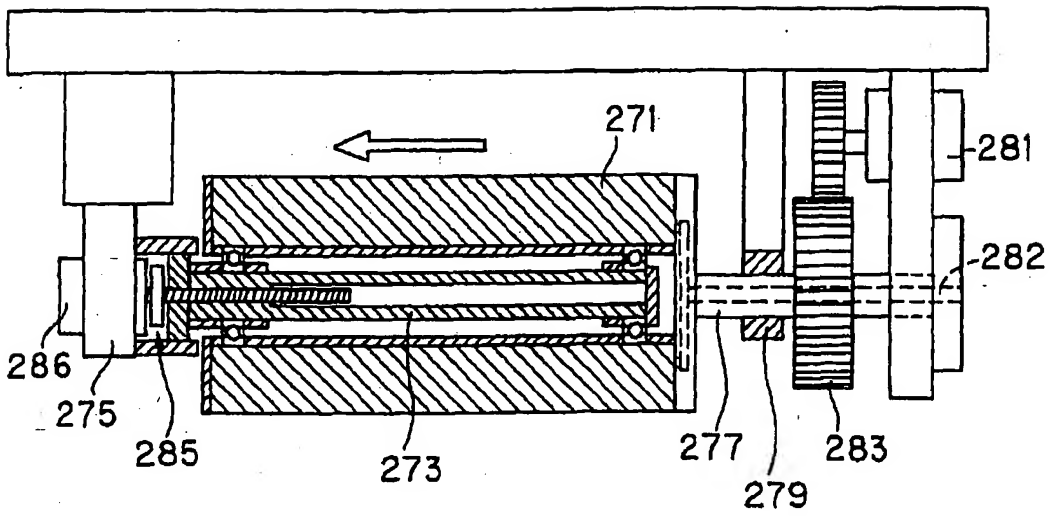
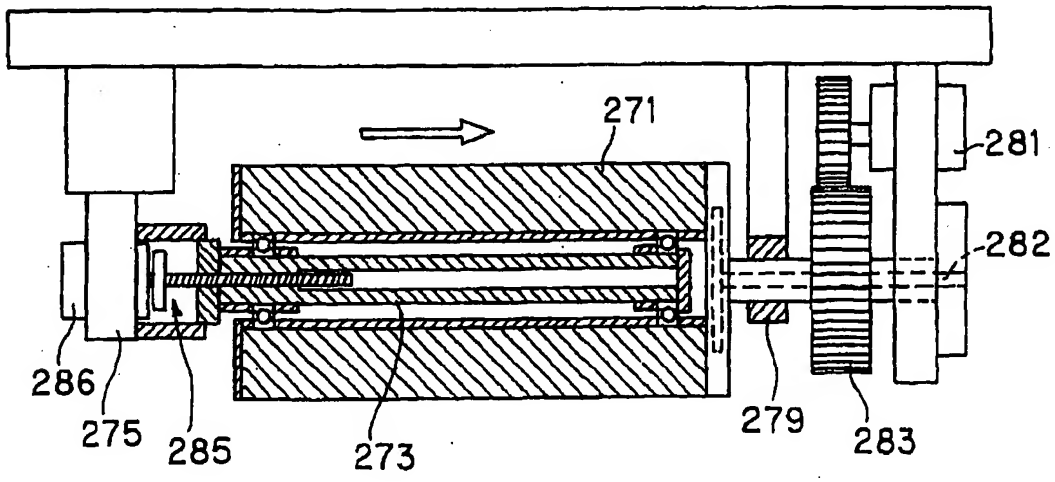


Fig. 27 (b)



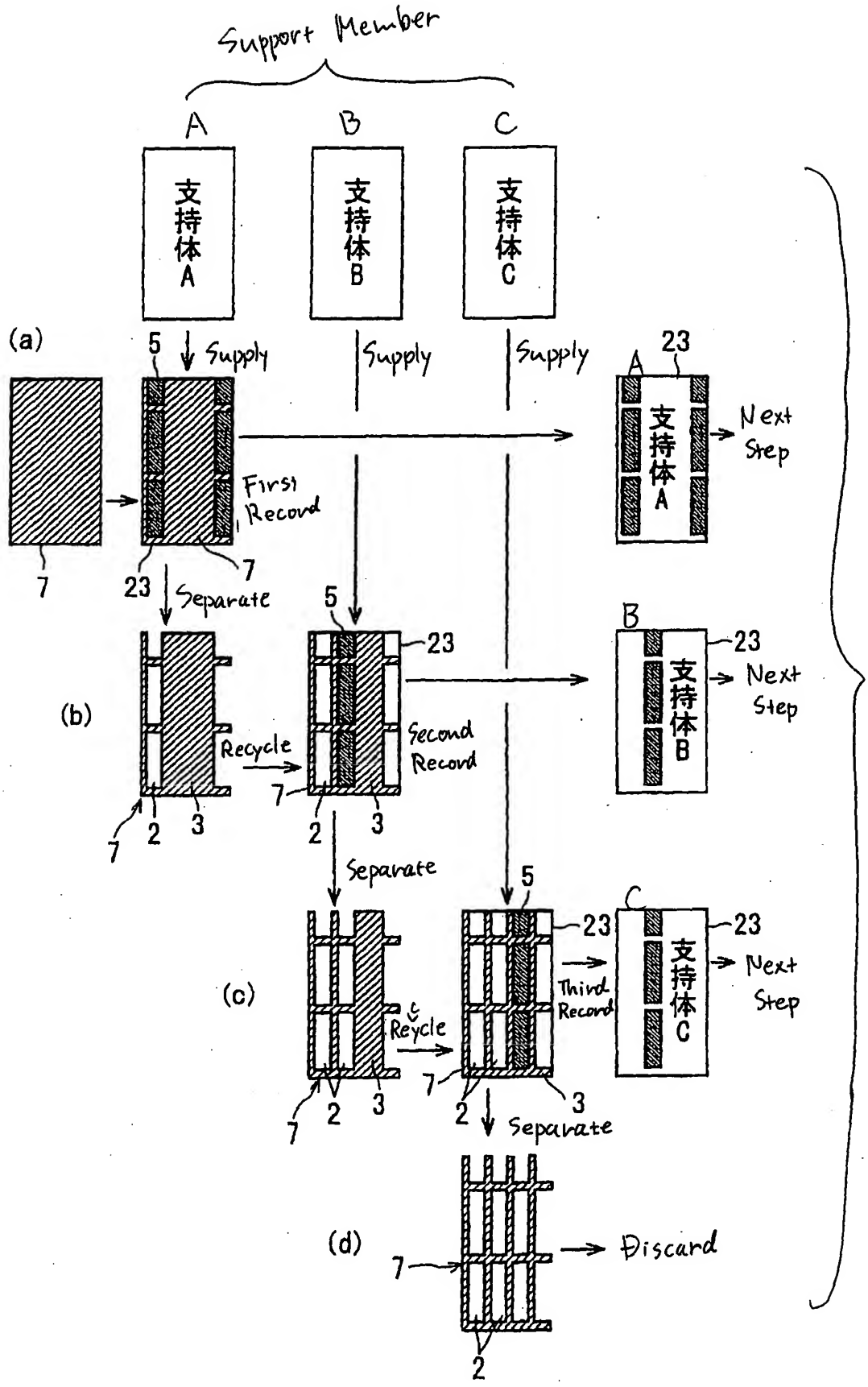

Support Member
A
B
C
支持体A
支持体B
支持体C
(a)
5
Supply
Supply
Supply
23
A
支持体A
Next Step
First Record
7
23
Separate
(b)
5
23
B
23
支持体B
Next Step
Recycle
Second Record
7
2
3
Separate
(c)
5
23
C
23
Third Record
支持体C
Next Step
Recycle
7
2
3
Separate
(d)
7
Discard
2

Fig. 28

Fig. 29

a) Start
(S501) Deliver in a support member (A)
(S502) Deliver in a transfer sheet
(S503) Superpose the transfer sheet on the support member in a normal position
(S504) Record
(S505) Separate the transfer sheet
(S506) Deliver out the support member (A)
(S507) Deliver in a support member (B)
(S508) Correct the position of the transfer sheet and carry out recording
(S509) Separate the transfer sheet
(S510) Deliver out the support member (B)
(S511) Deliver in a support member (C)
(S512) Correct the position of the transfer sheet and carry out recording
(S513) Separate the transfer sheet
(S514) Discard the transfer sheet
(S515) Deliver out the support member (C)
b) End

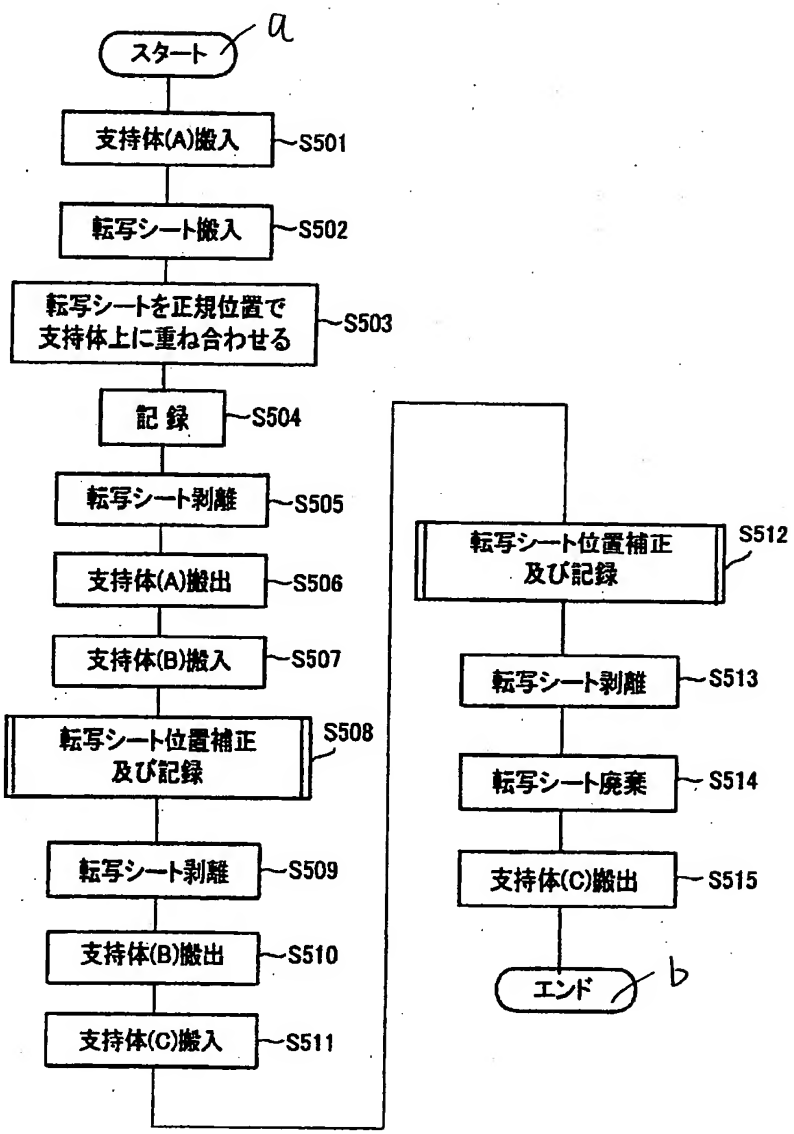


Fig. 30

a) Start
(S601) Detect a recording position on a transfer sheet (a recording start position and an inclination angle)
(S602) Correct the position of the transfer sheet based on a result of the detection of the recording start position and the inclination angle (by means of a separating roller and a stage)
(S603) Superpose the transfer sheet obtained after the correction of the position on a support member in a normal position
(S604) Shift a recording position at a predetermined pitch and carry out recording
b) Return

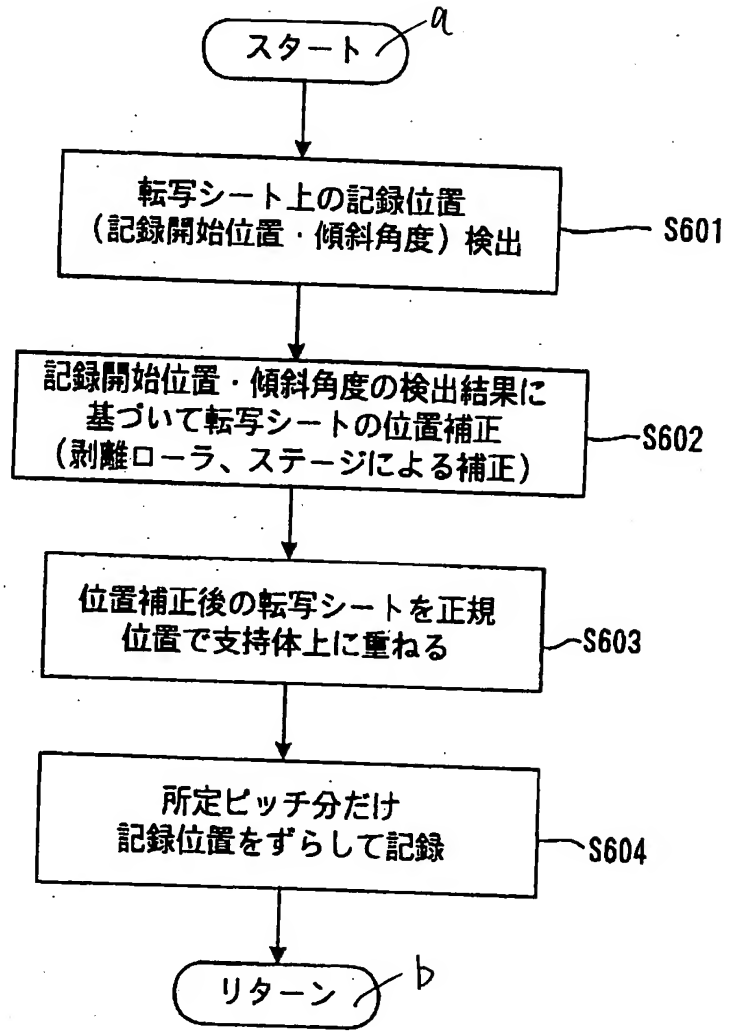
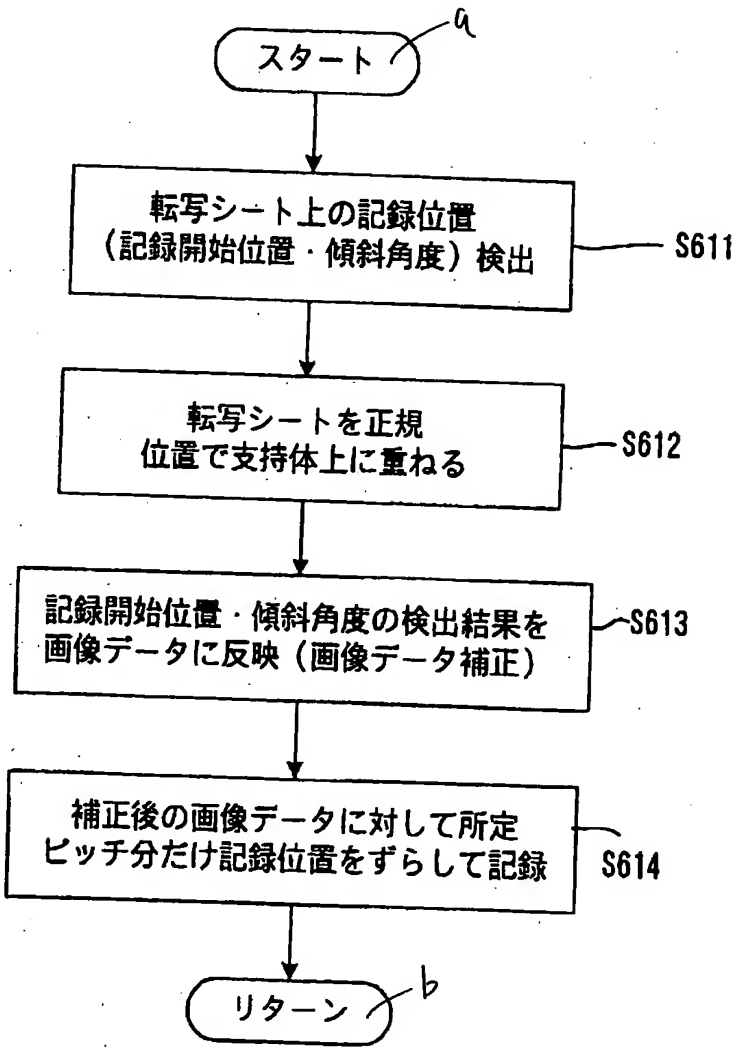


Fig. 31

a) Start
(S611) Detect a recording position on a transfer sheet (a recording start position and an inclination angle)
(S612) Superpose the transfer sheet on a support member in a normal position
(S613) Reflect a result of the detection of the recording start position and the inclination angle on image data (image data correction)
(S614) Shift the recording position at a predetermined pitch with respect to the corrected image data and carry out recording
b) Return



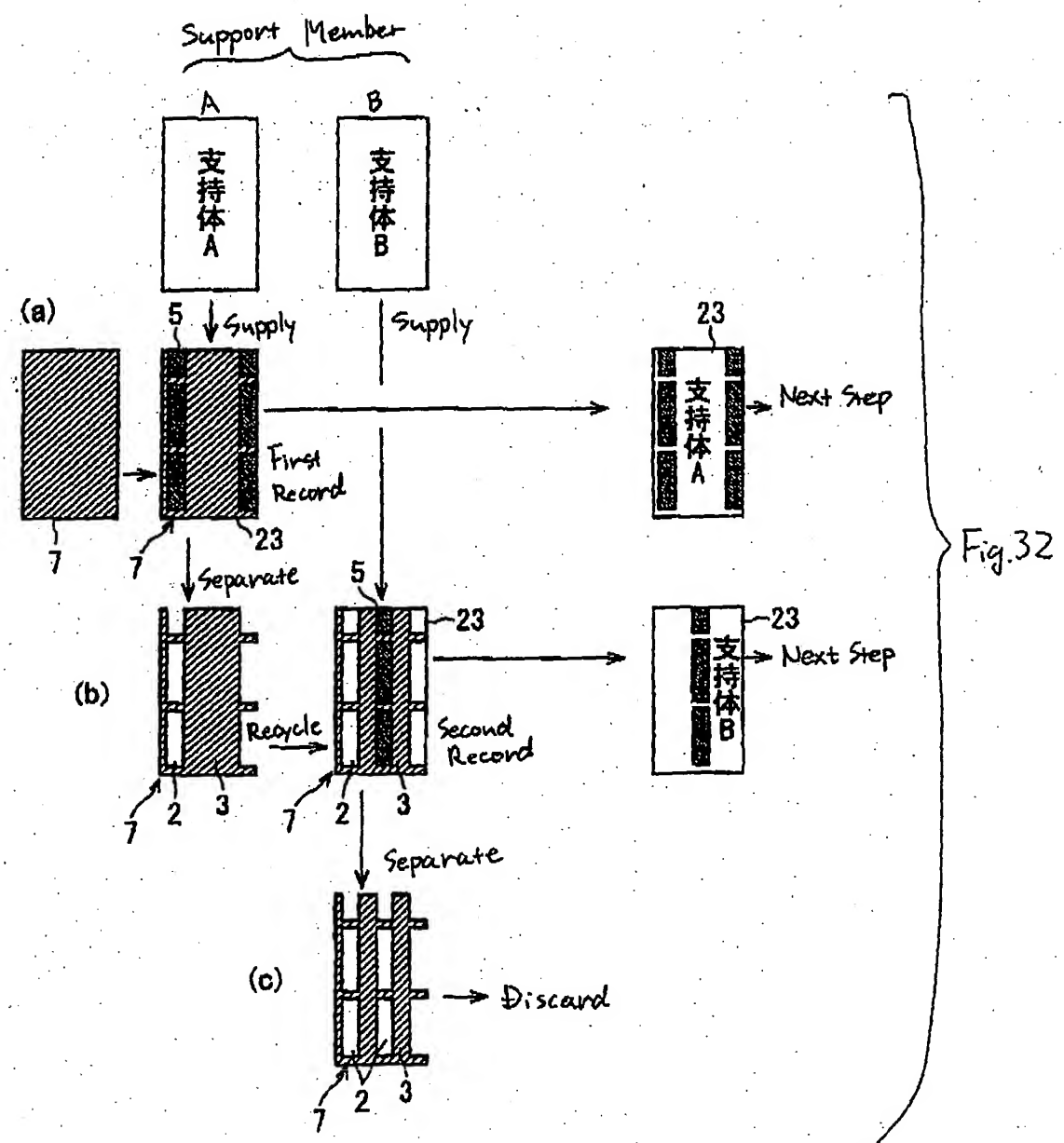
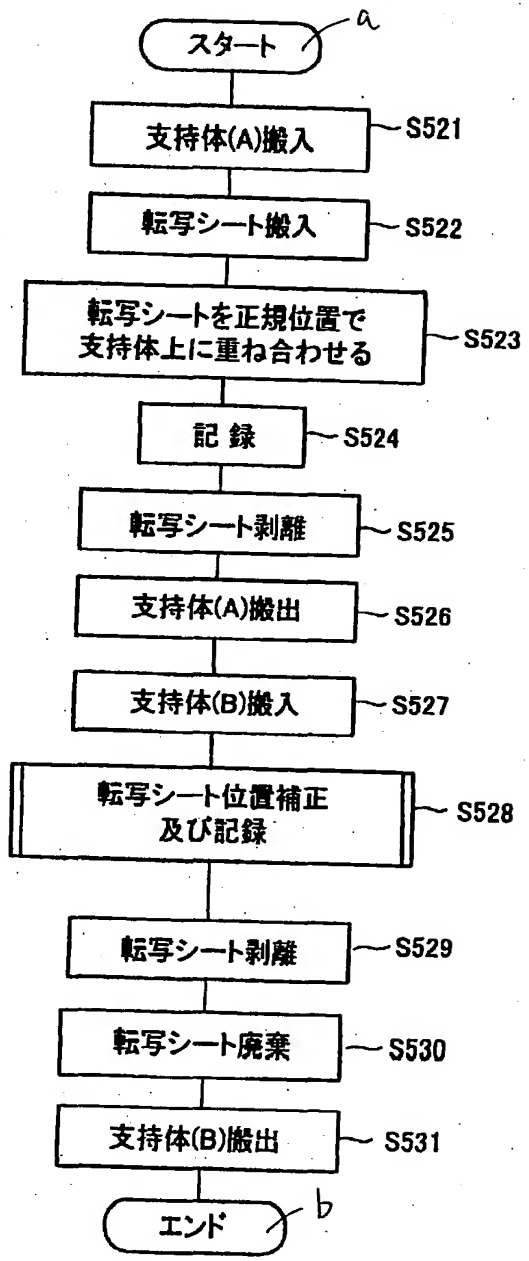

Support Member
A
B
支持体A
支持体B
(a)
5
Supply
Supply
23
支持体A
Next Step
First Record
7
7
23
Separate
5
23
23
(b)
支持体B
Next Step
Recycle
Second Record
7
2
3
7
2
3
Separate
(c)
Discard
7
2
3

Fig.32

Fig. 33

a) Start
(S521) Deliver in a support member (A)
(S522) Deliver in a transfer sheet
(S523) Superpose the transfer sheet on the support member in a normal position
(S524) Record
(S525) Separate the transfer sheet
(S526) Deliver out the support member (A)
(S527) Deliver in a support member (B)
(S528) Correct the position of the transfer sheet and carry out recording
(S529) Separate the transfer sheet
(S530) Discard the transfer sheet
(S531) Deliver out the support member (B)
b) End



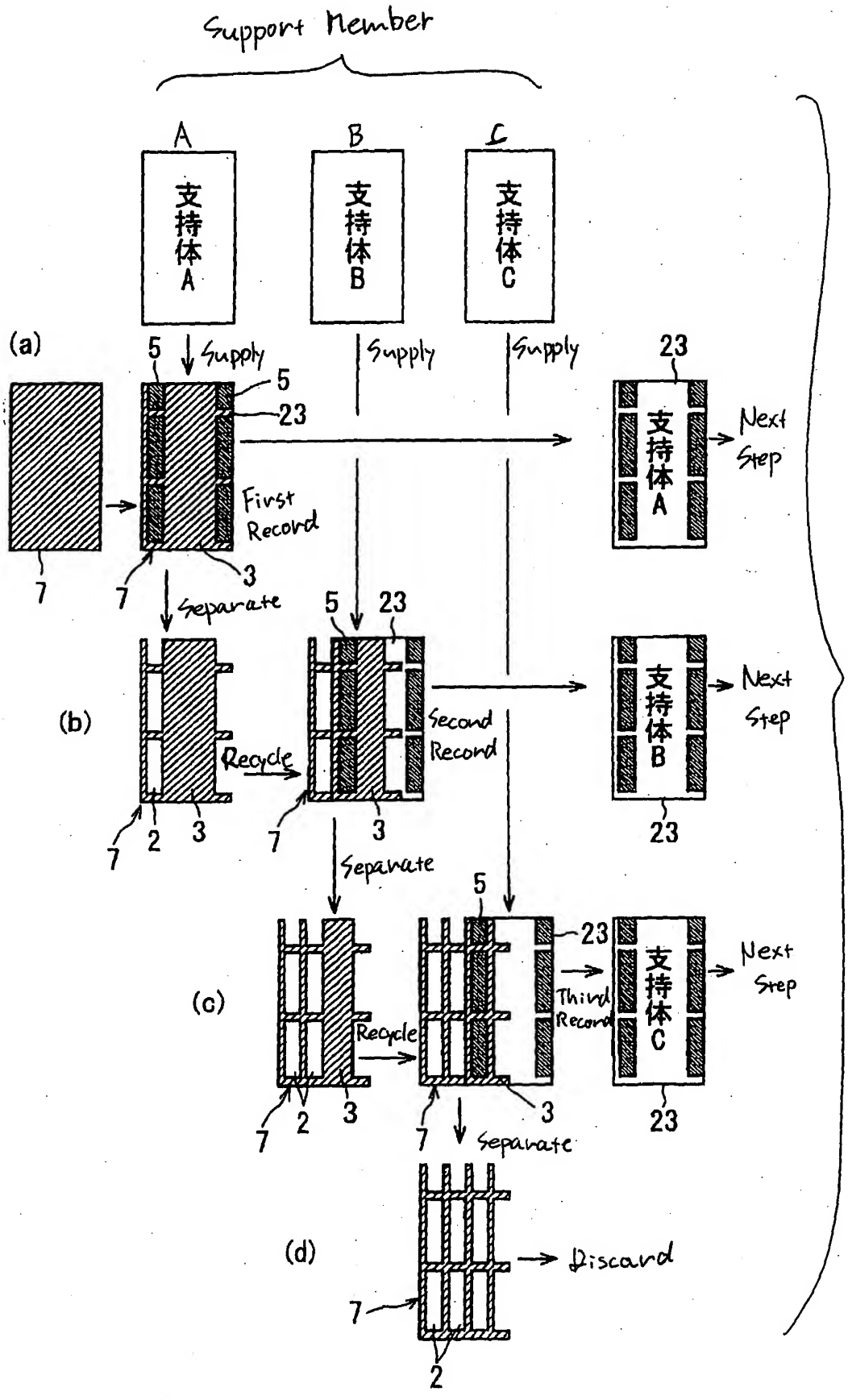
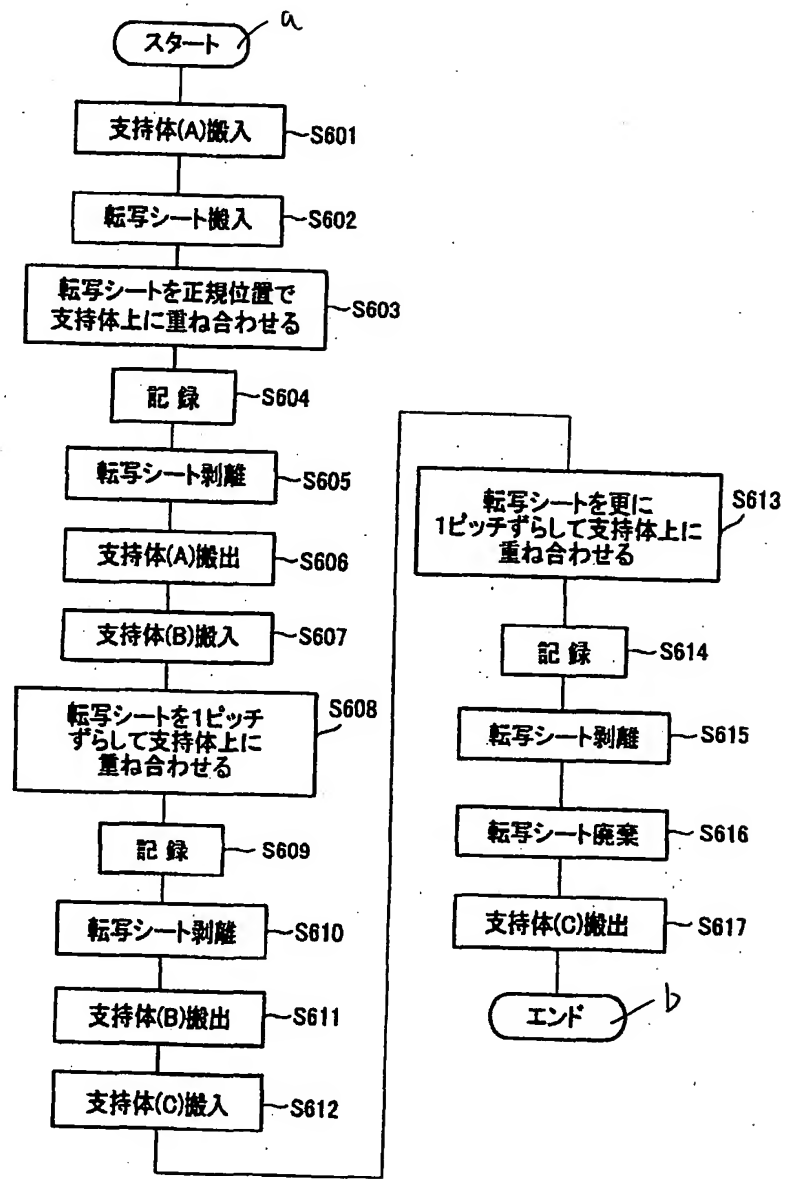

Support Member
A
B
C
支持体A
支持体B
支持体C
(a)
5
Supply
Supply
Supply
23
5
23
First Record
Next Step
支持体A
7
7
3
Separate
(b)
5
23
Recycle
Second Record
Next Step
支持体B
7
2
3
7
3
23
Separate
(c)
5
23
Recycle
Third Record
Next Step
支持体C
7
2
3
7
3
23
Separate
(d)
Discard
7
2

Fig.34

Fig. 35



a) Start
(S601) Deliver in a support member (A)
(S602) Deliver in a transfer sheet
(S603) Superpose the transfer sheet on the support member in a normal position
(S604) Record
(S605) Separate the transfer sheet
(S606) Deliver out the support member (A)
(S607) Deliver in a support member (B)
(S608) Shift the transfer sheet at one pitch and superpose the transfer sheet on the support member
(S609) Record
(S610) Separate the transfer sheet
(S611) Deliver out the support member (B)
(S612) Deliver in a support member (C)
(S613) Shift the transfer sheet at one more pitch and superpose the transfer sheet on the support member
(S614) Record
(S615) Separate the transfer sheet
(S616) Discard the transfer sheet
(S617) Deliver out the support member (C)
b) End

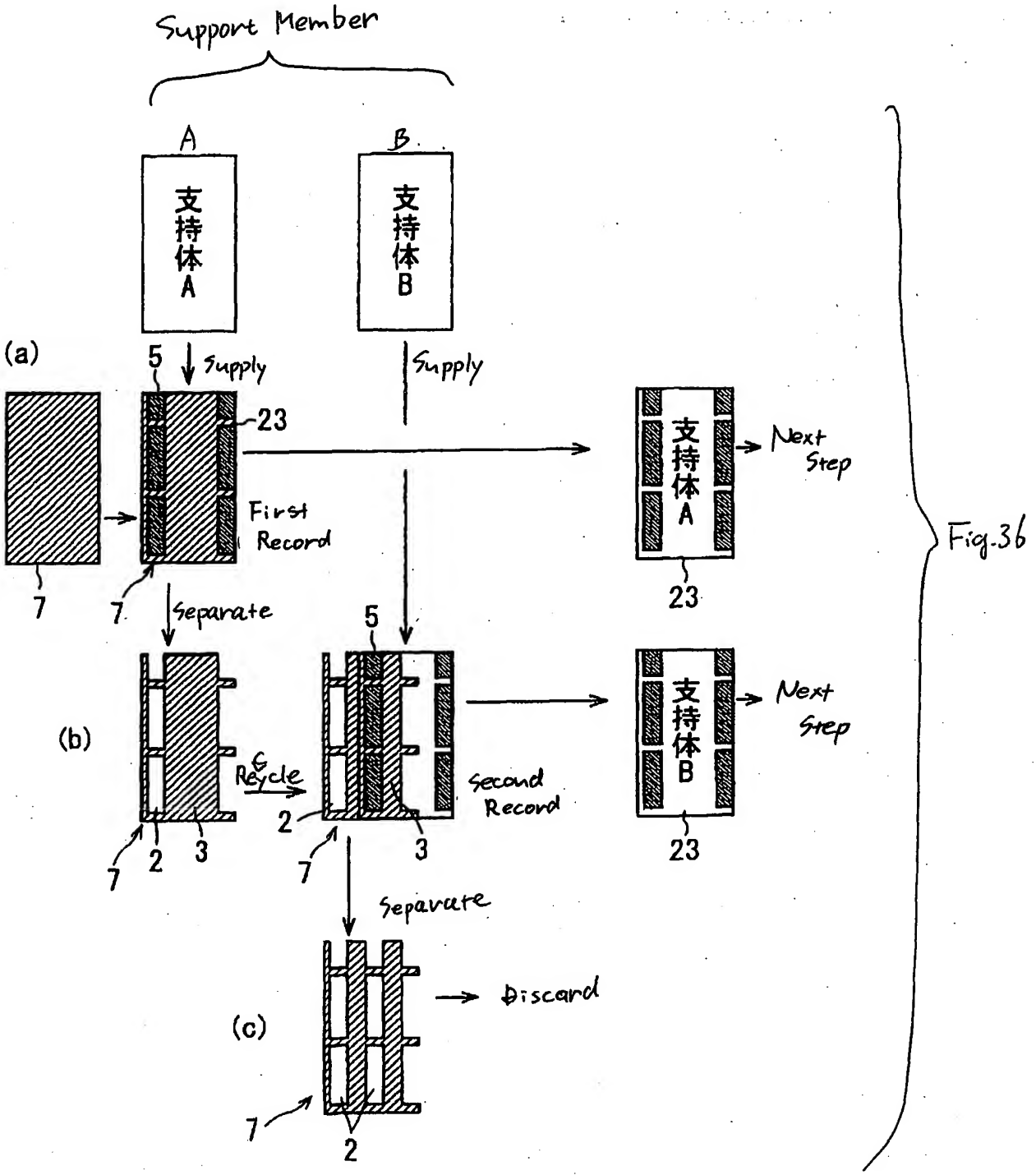

Support Member
A
B
支持体A
支持体B
(a)
5
Supply
Supply
23
First Record
7
7
Separate
支持体A
Next Step
23
5
(b)
Recycle
Second Record
2
3
7
2
3
7
支持体B
Next Step
23
Separate
(c)
Discard
7
2

Fig.36

Fig. 37

a) Start
(S621) Detect a recording position on a transfer sheet (a recording start position and an inclination angle)
(S622) Correct the position of the transfer sheet based on a result of the detection of the recording start position and the inclination angle (correction to be carried out by a separating roller and a stage)
(S623) Superpose the transfer sheet obtained after the correction of the position on a support member with a shift of a predetermined pitch
(S624) Carry out recording in a normal position
b) Return

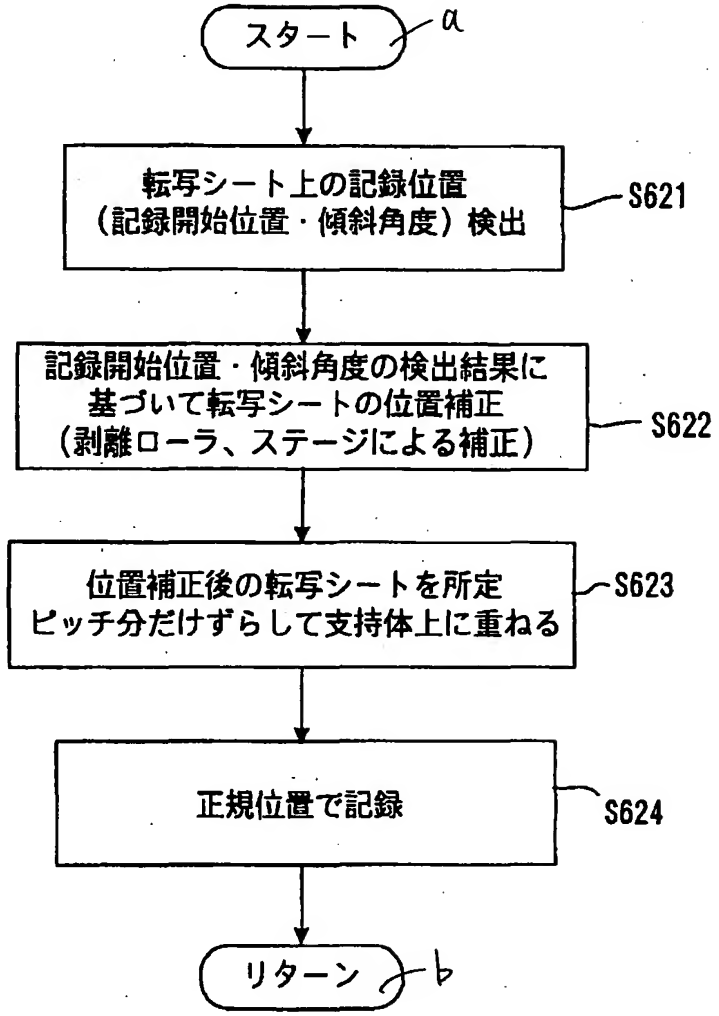
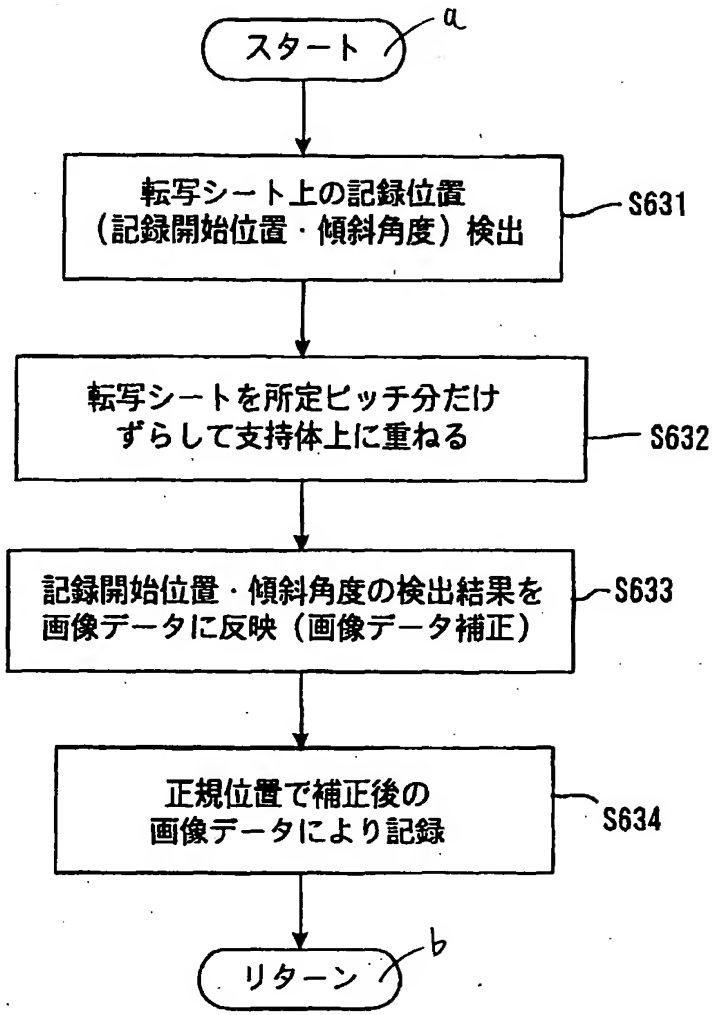


Fig. 38

a) Start
(S631) Detect a recording position on a transfer sheet (a recording start position and an inclination angle)
(S632) Superpose the transfer sheet on a support member with a shift of a predetermined pitch
(S633) Reflect a result of the detection of the recording start position and the inclination angle on image data (image data correction)
(S634) Carry out recording based on the corrected image data in a normal position
b) Return



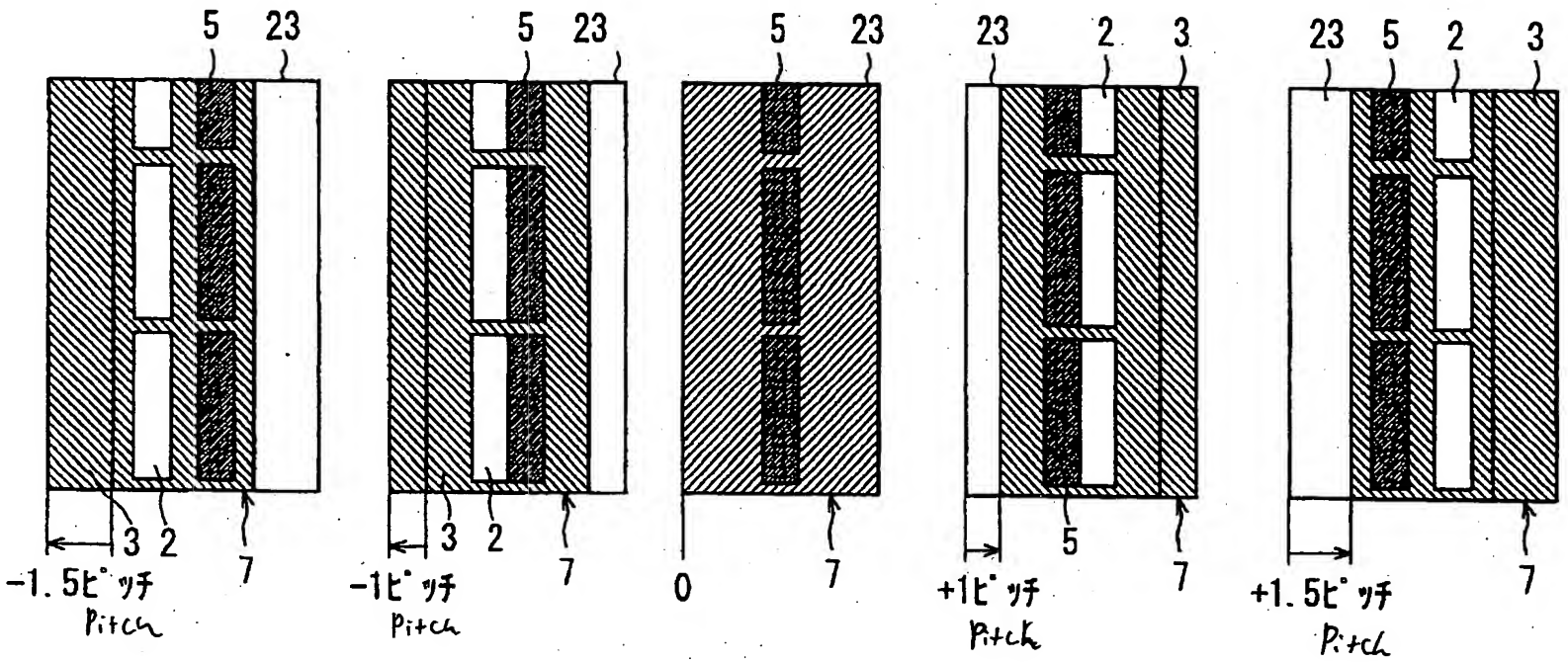


Fig.39(a) Fig.39(b) Fig.39(c) Fig.39(d) Fig.39(e)

Fig.40(a)

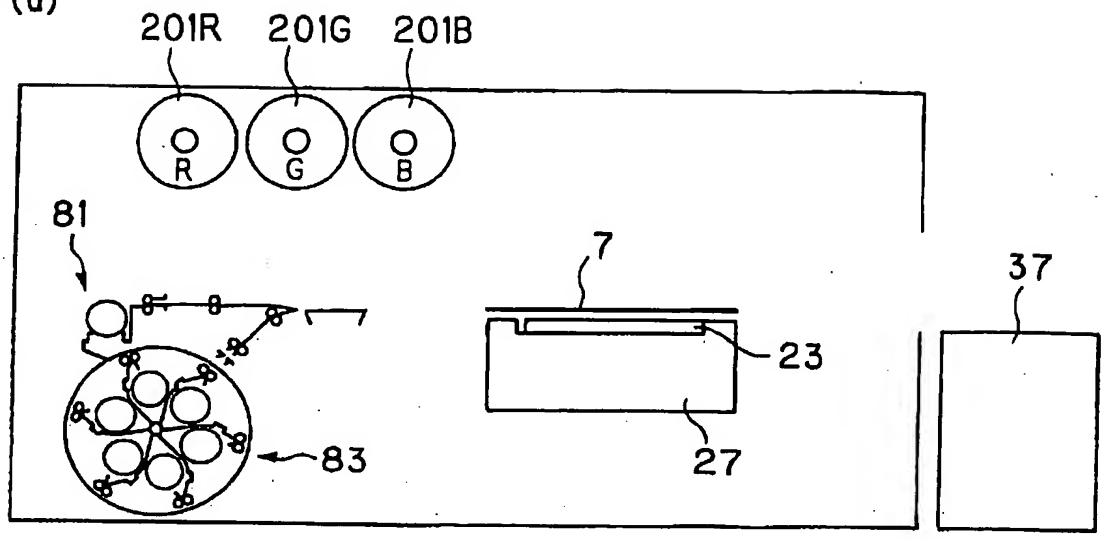
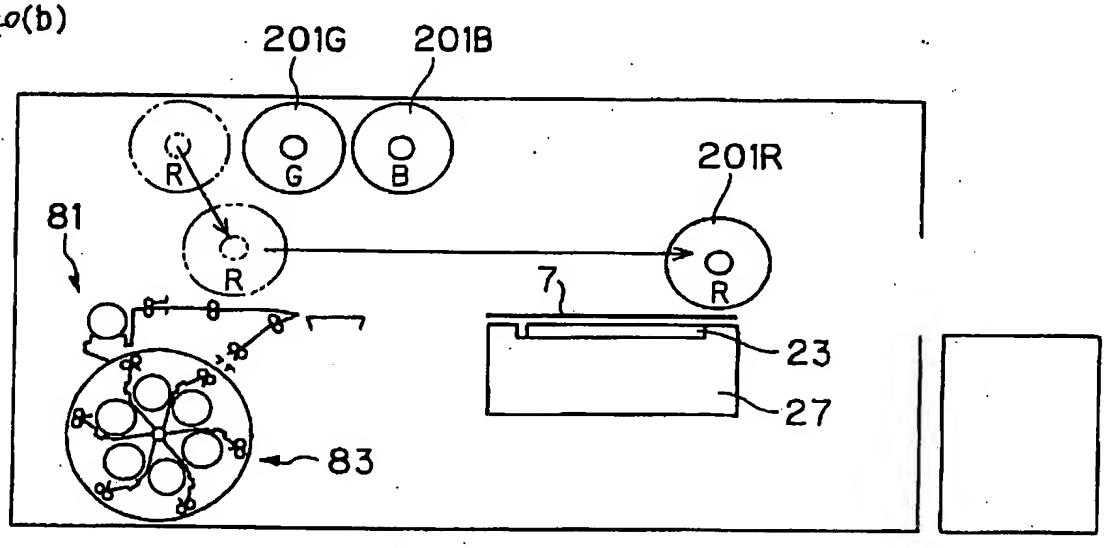


Fig.40(b)



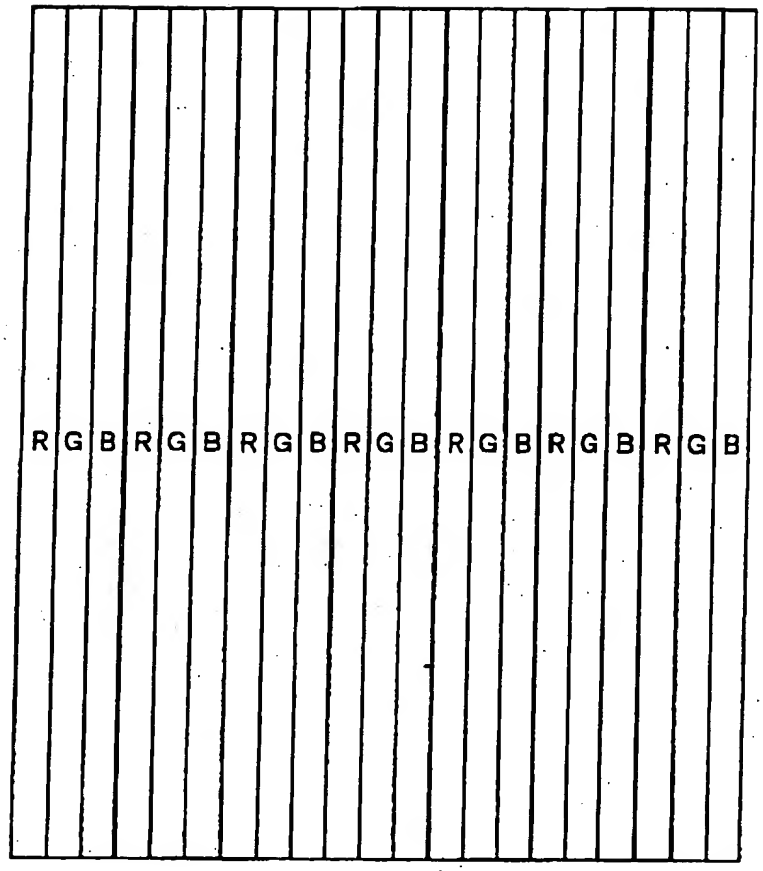


Fig. 41

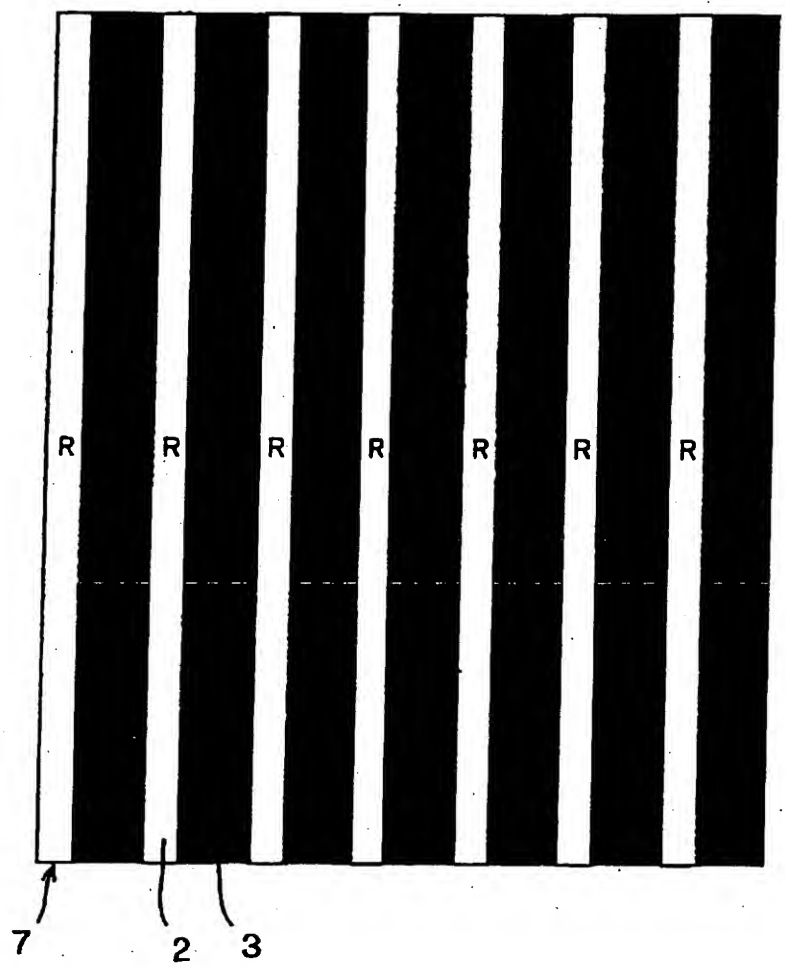


Fig. 42

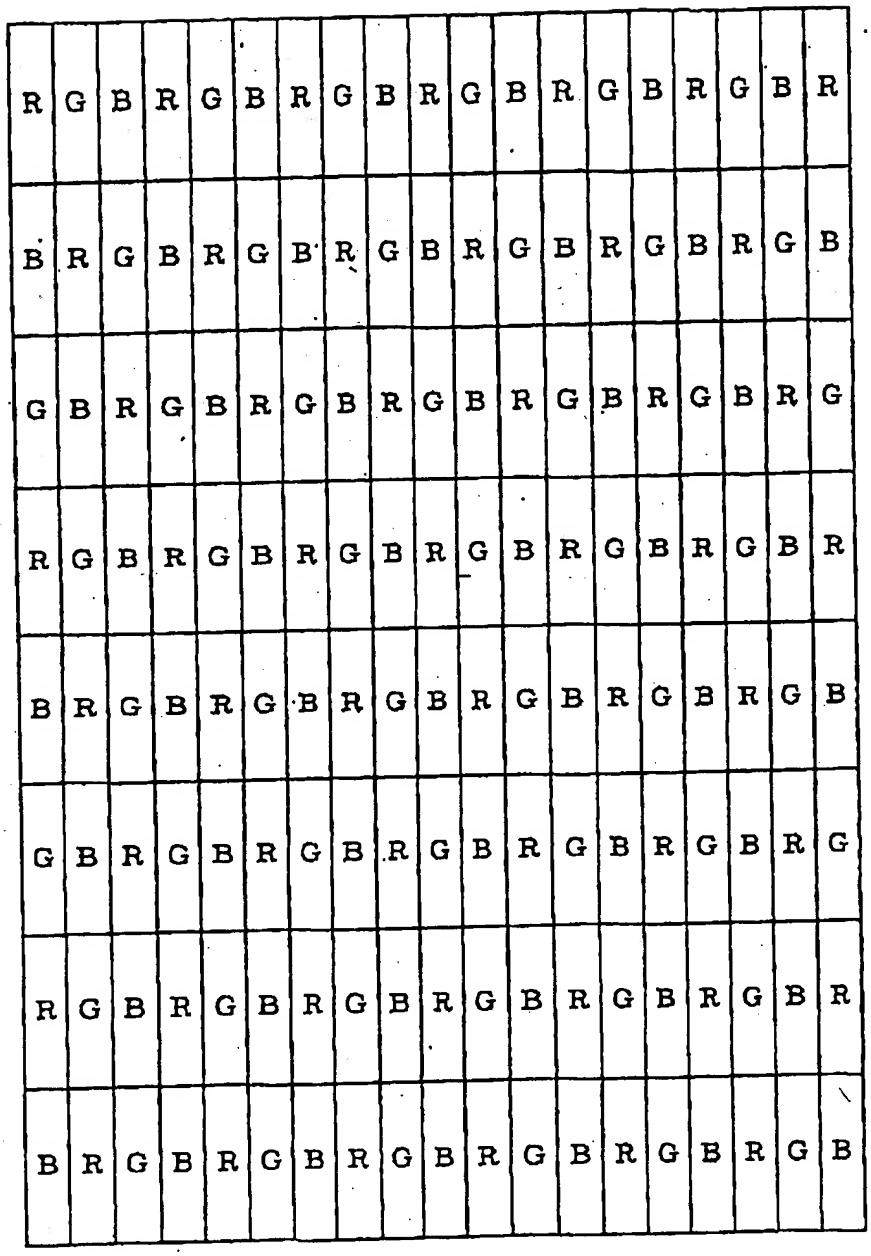

R G B R G B R G B R G B R G B R G B R
B R G B R G B R G B R G B R G B R G B
G B R G B R G B R G B R G B R G B R G
R G B R G B R G B R G B R G B R G B R
B R G B R G B R G B R G B R G B R G B
G B R G B R G B R G B R G B R G B R G
R G B R G B R G B R G B R G B R G B R
B R G B R G B R G B R G B R G B R G B

Fig. 43

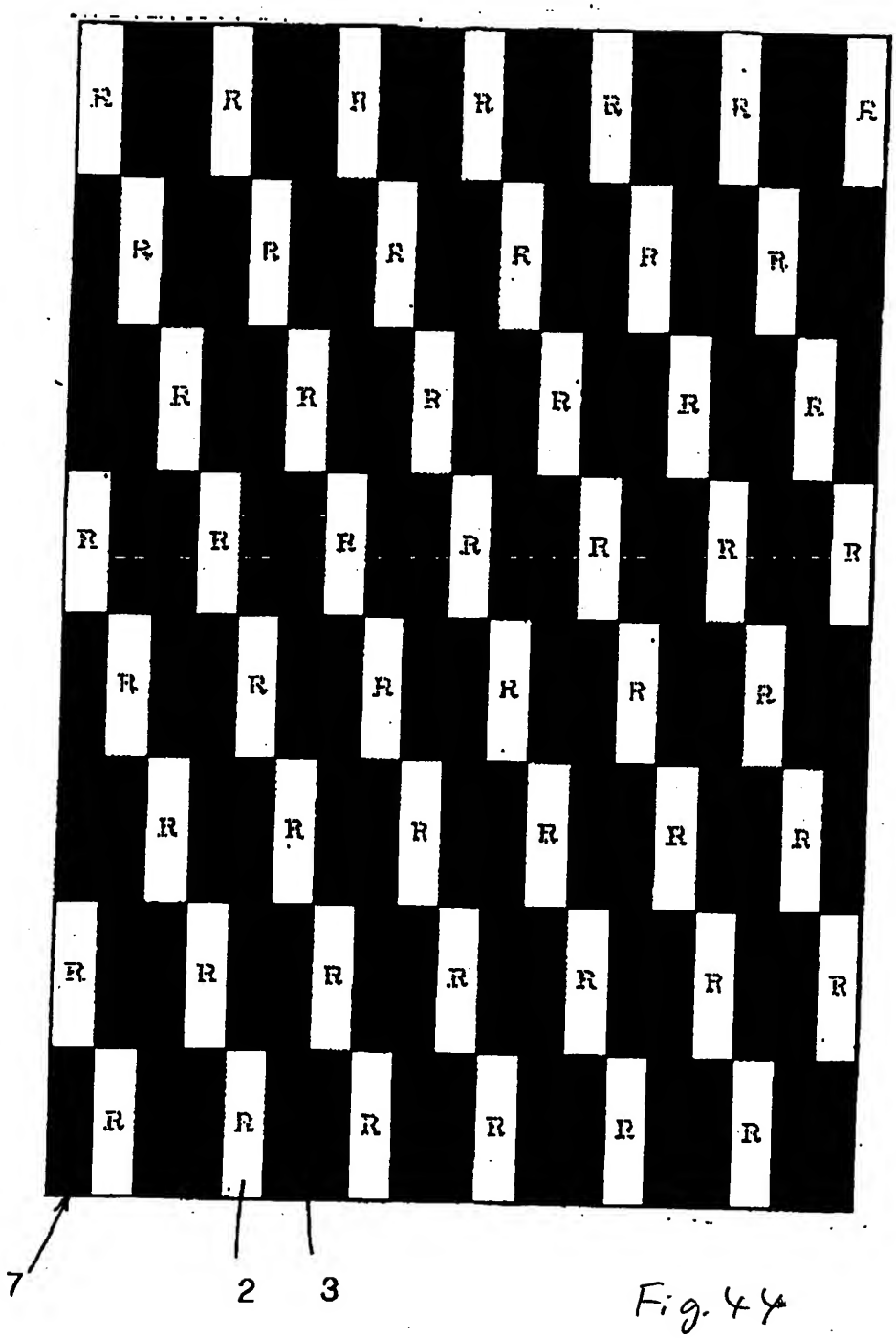


Fig. 4

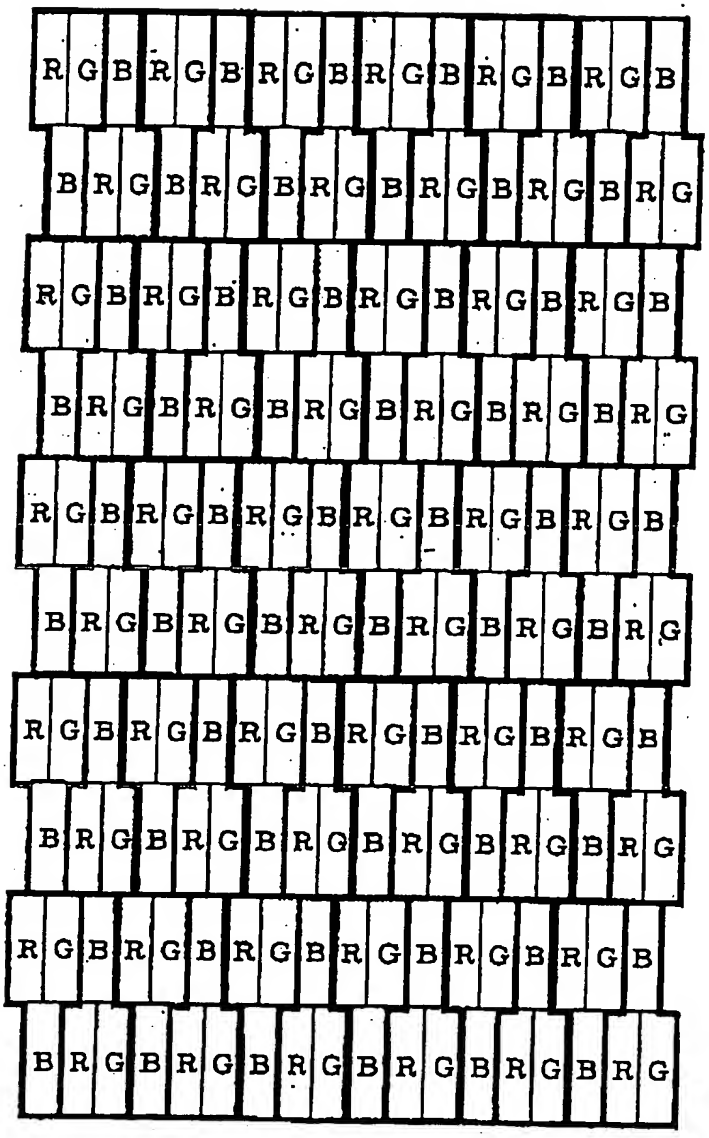

R G B R G B R G B R G B R G B R G B
B R G B R G B R G B R G B R G B R G
R G B R G B R G B R G B R G B R G B
B R G B R G B R G B R G B R G B R G
R G B R G B R G B R G B R G B R G B
B R G B R G B R G B R G B R G B R G
R G B R G B R G B R G B R G B R G B
B R G B R G B R G B R G B R G B R G
R G B R G B R G B R G B R G B R G B
B R G B R G B R G B R G B R G B R G

Fig. 45

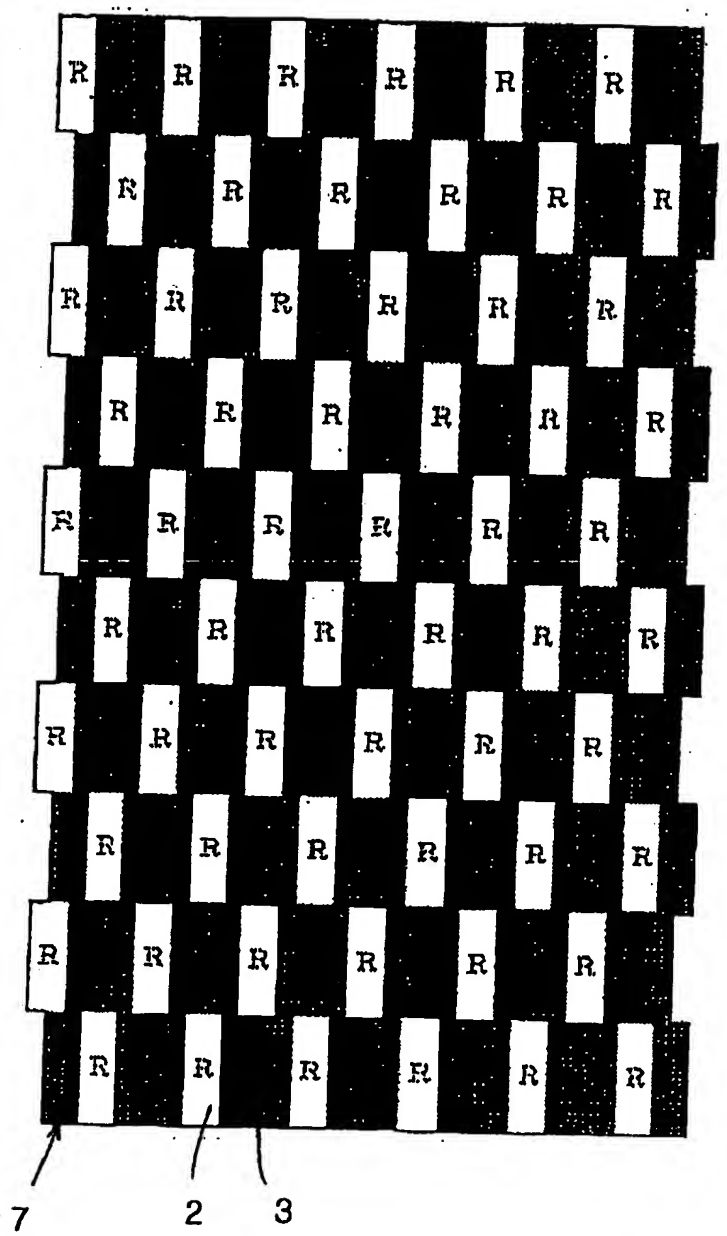


Fig. 4b

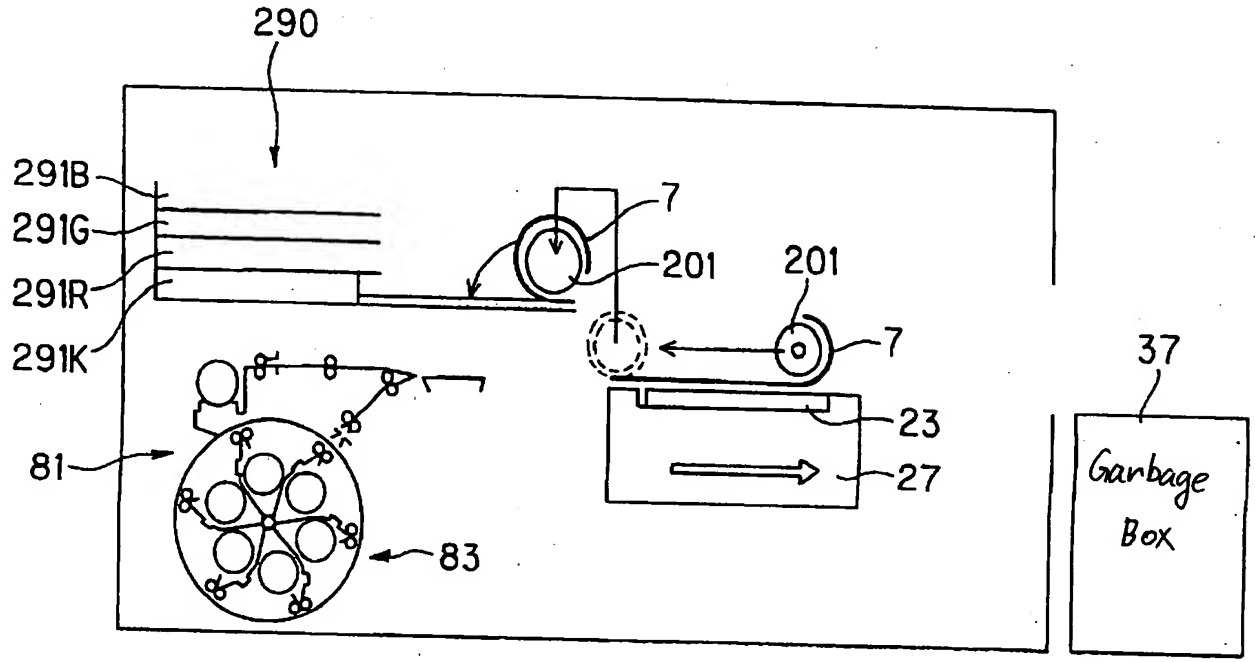


Fig. 47

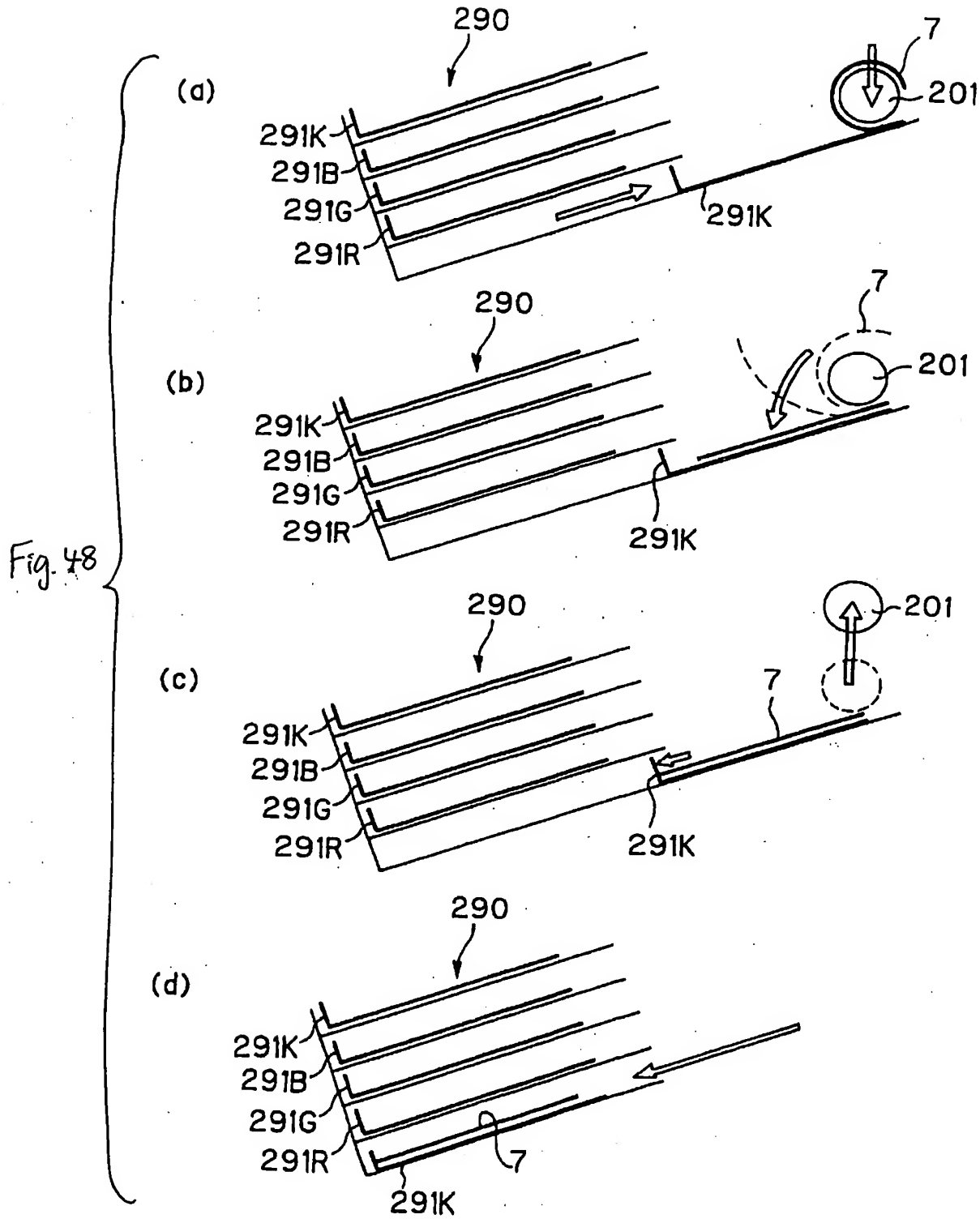

(a)
290
7
201
291K
291B
291G
291R
291K
(b)
290
7
201
291K
291B
291G
291R
291K
(c)
290
201
7
291K
291B
291G
291R
291K
(d)
290
291K
291B
291G
291R
7
291K

Fig. 48

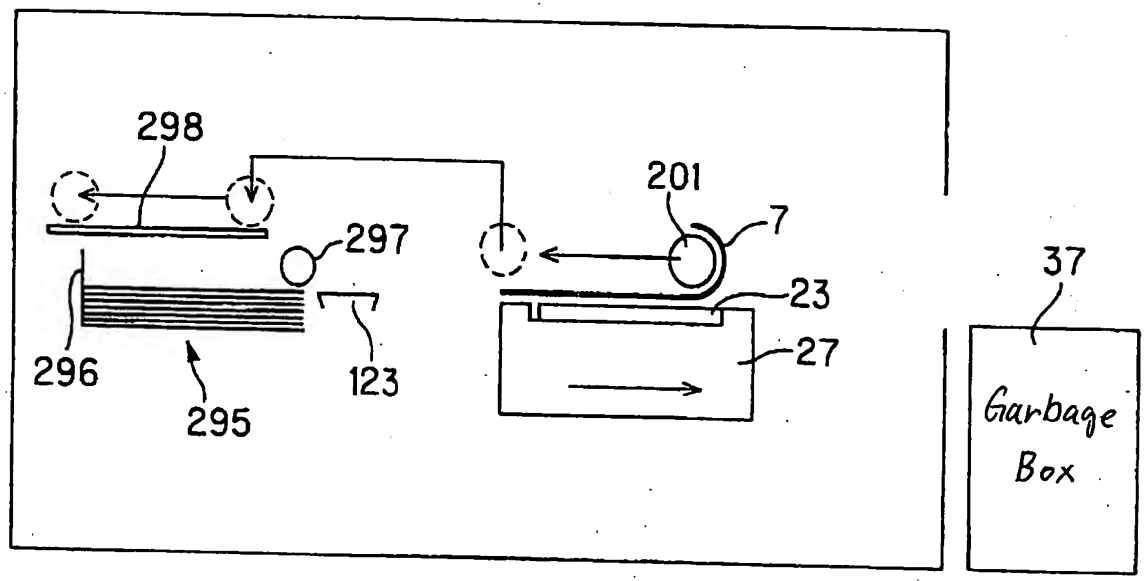


Fig. 49

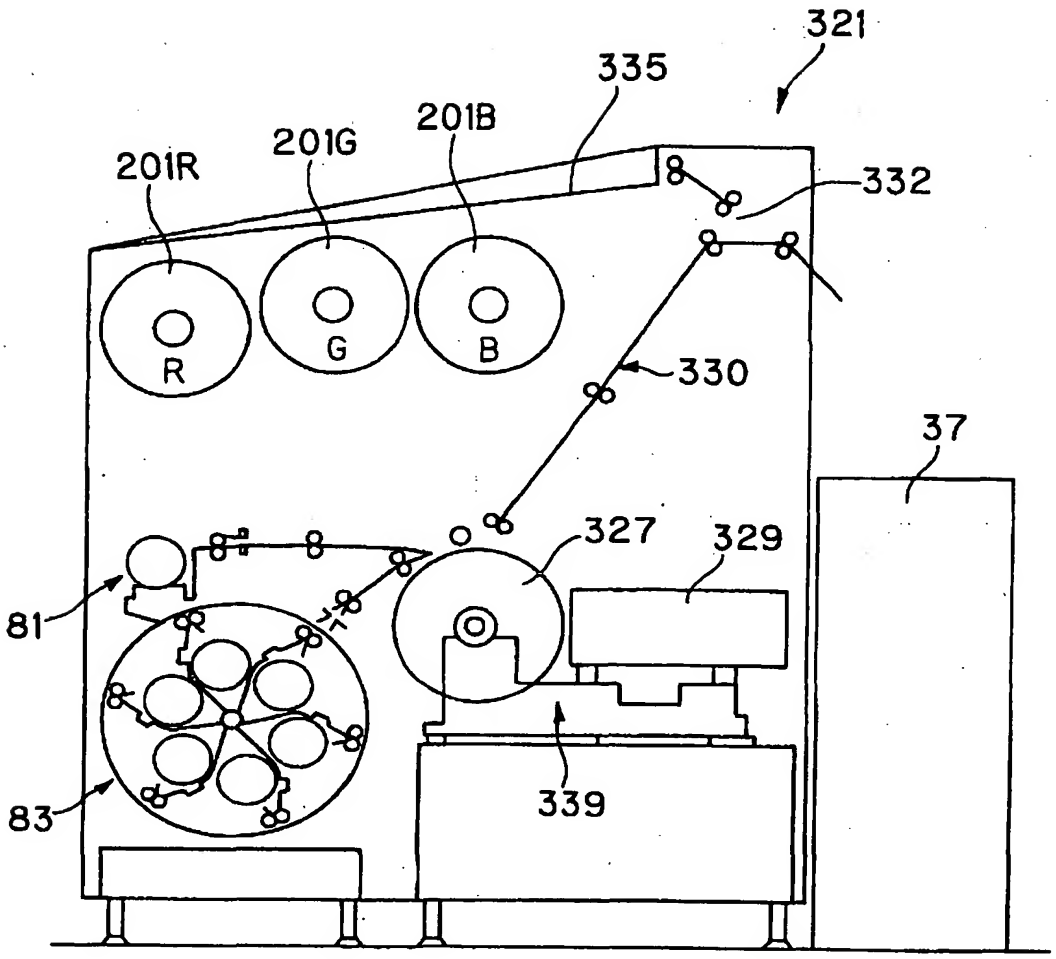


Fig. 50

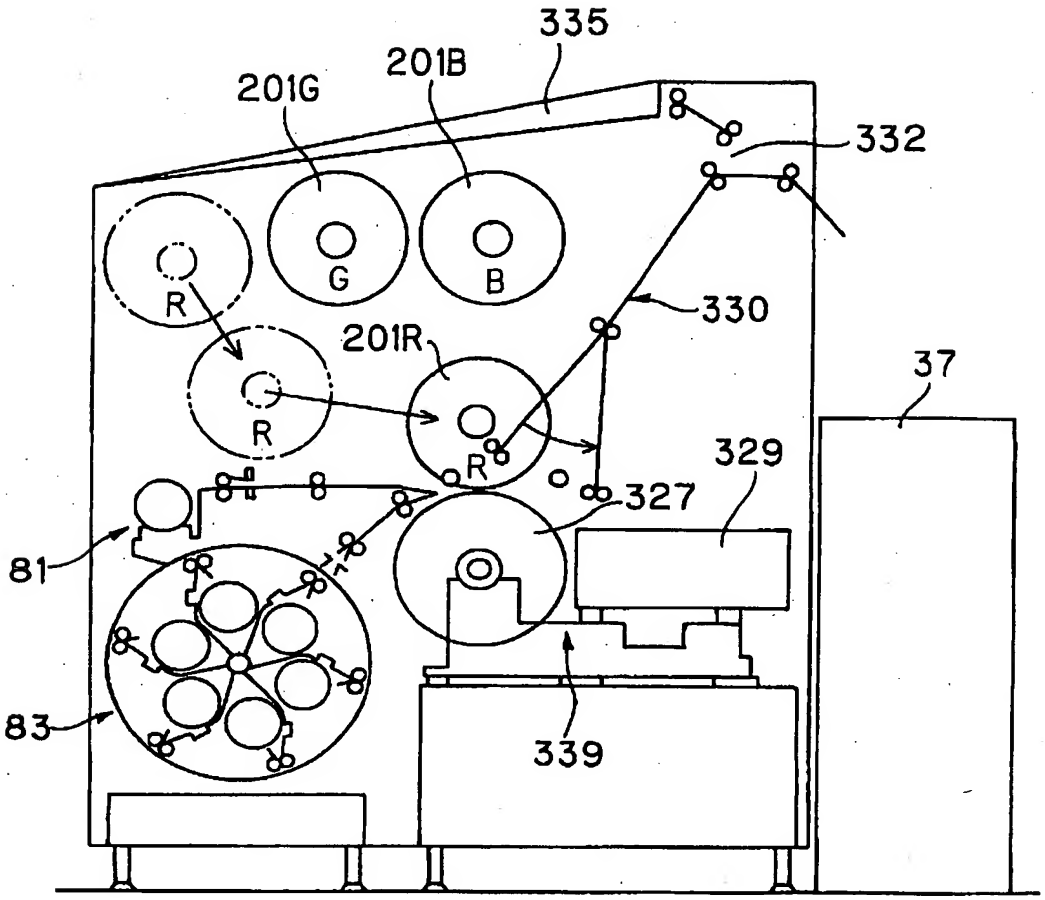


Fig. 51

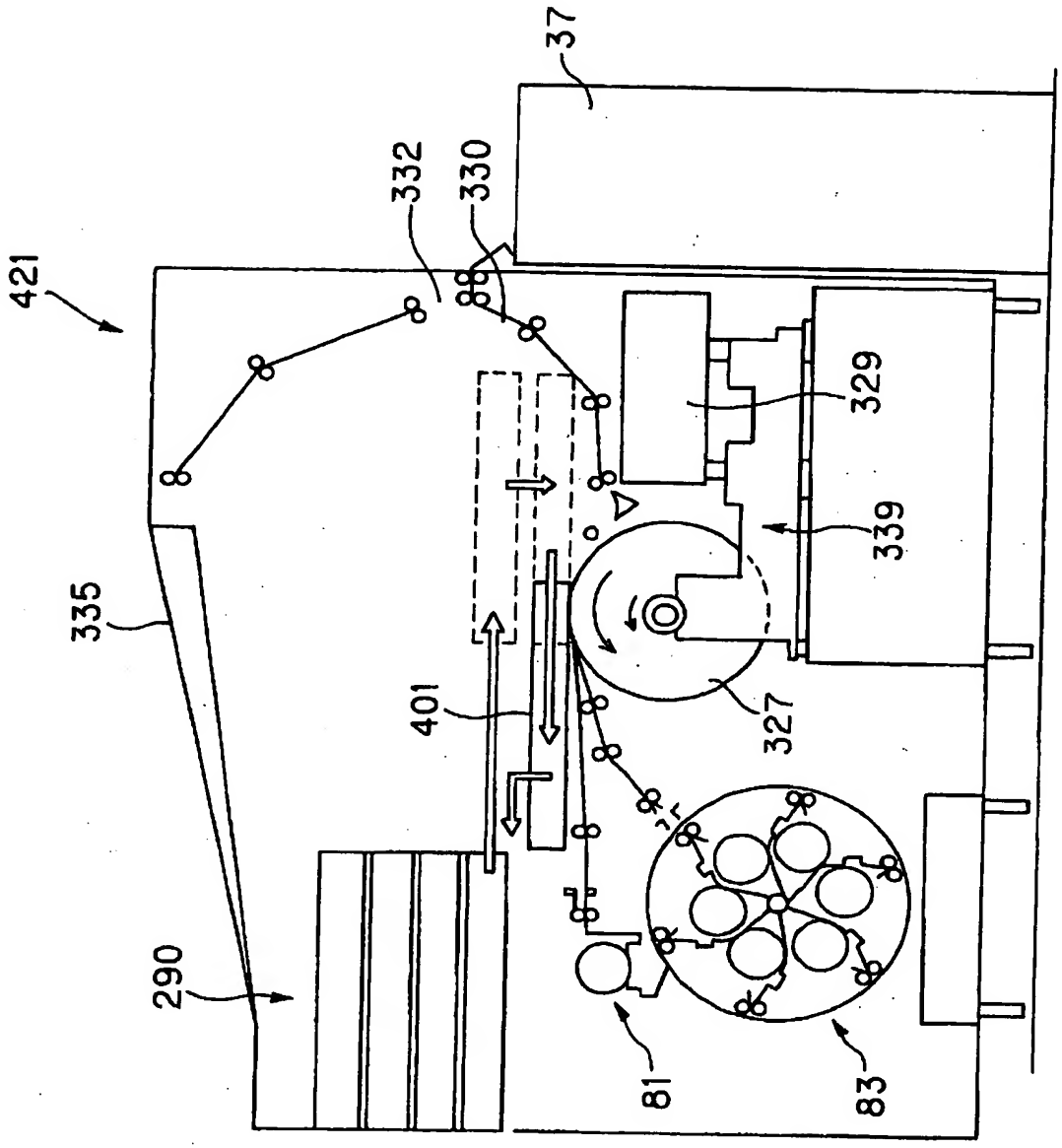


Fig. 52

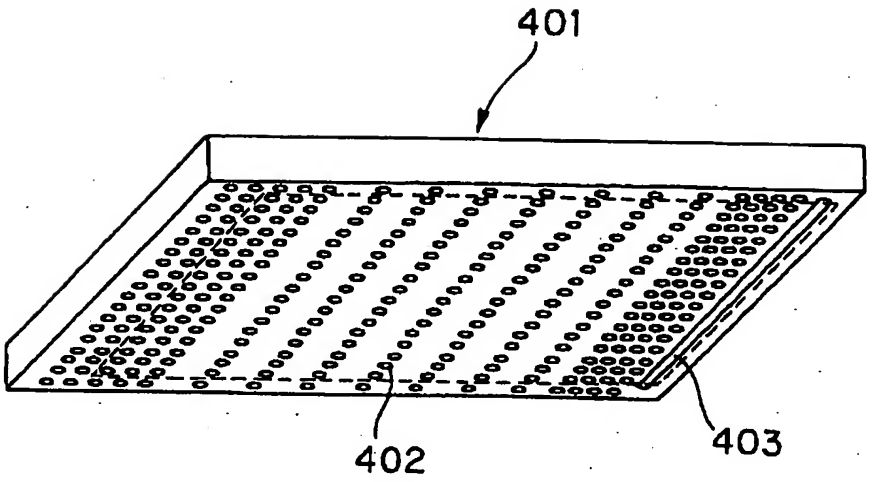


Fig. 53

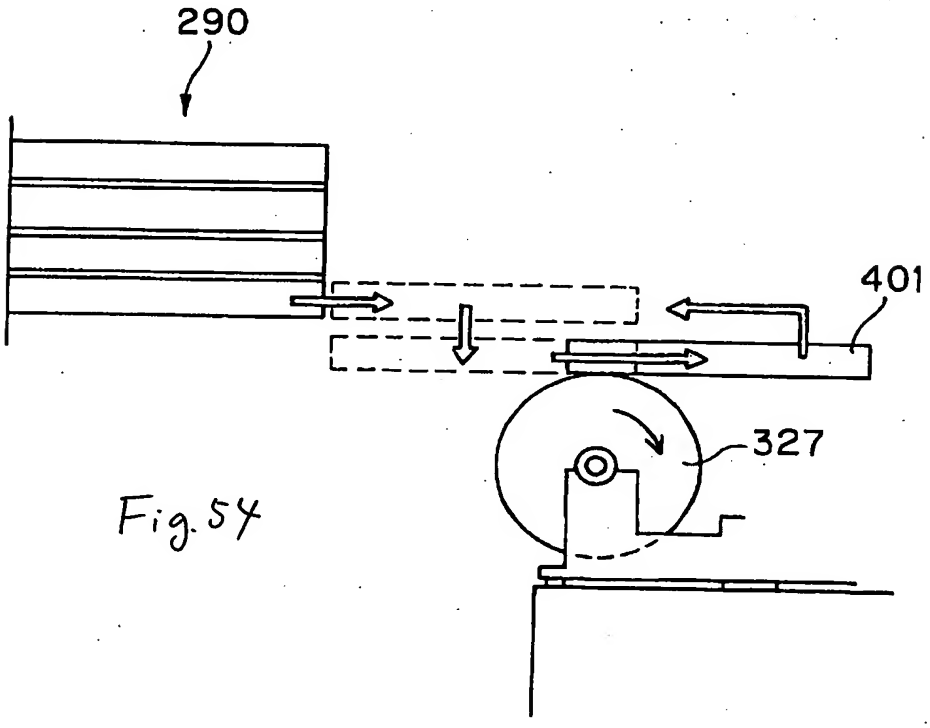


Fig. 54

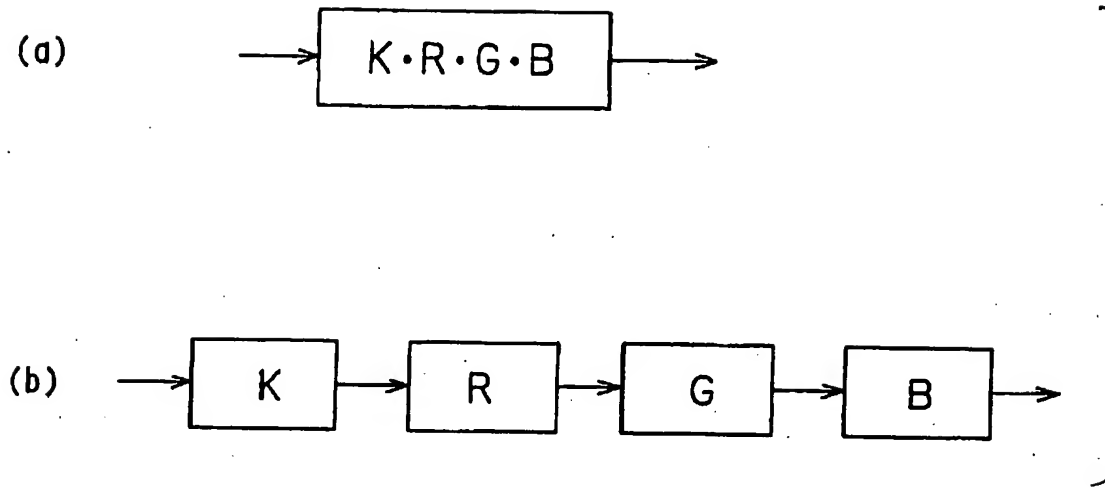


Fig.55

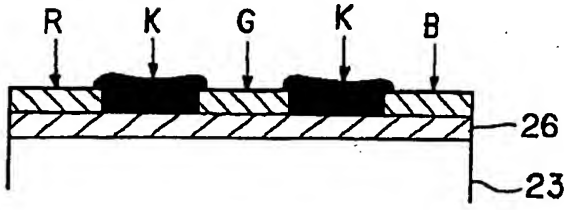


Fig.56

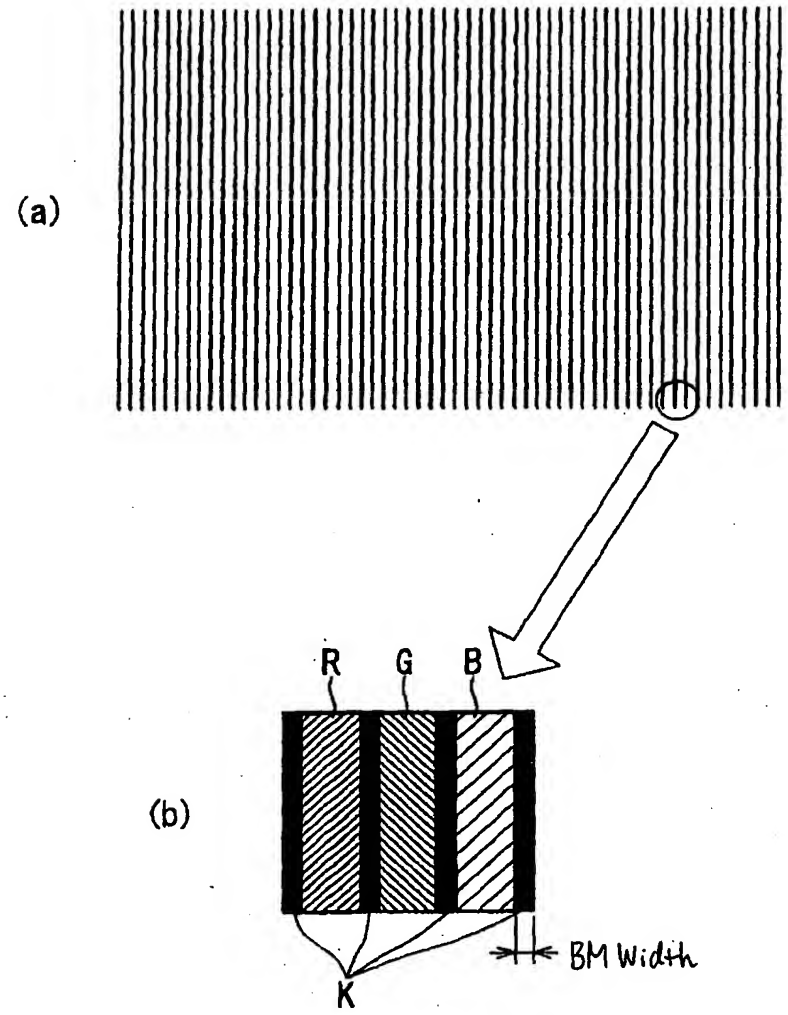


Fig. 57

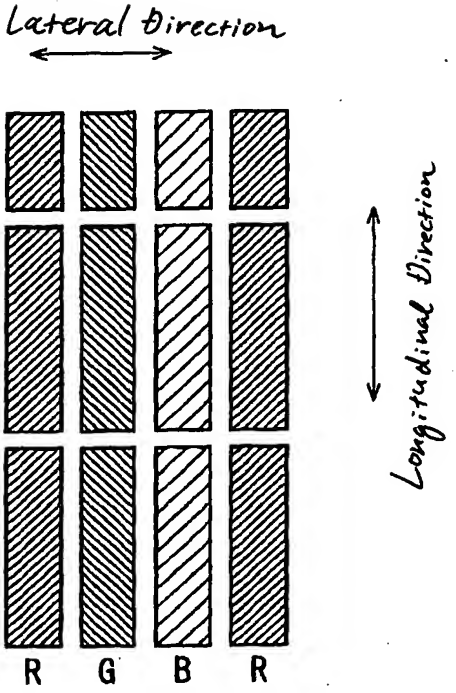


Fig. 58

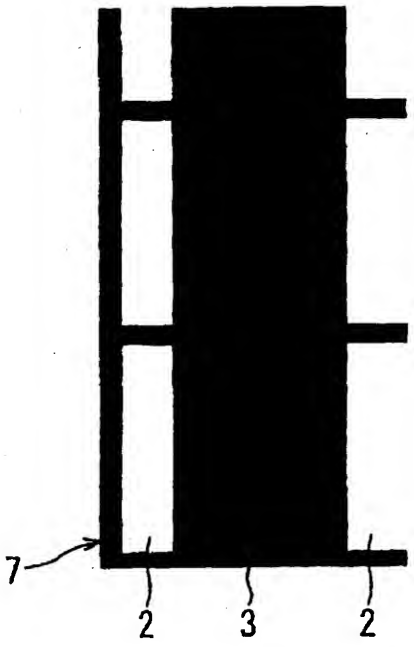


Fig. 59